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# Money Beliefs And Quality Of Life, Or, What Is Money For, If It Doesn't Buy Happiness?

Rosalind Maureen Callard

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**MONEY BELIEFS AND QUALITY OF LIFE  
or  
WHAT IS MONEY FOR, IF IT DOESN'T BUY HAPPINESS?**

by

**Rosalind Maureen Callard**

**Department of Psychology**

**Submitted in partial fulfilment  
of the requirements for the degree of  
Doctor of Philosophy**

**Faculty of Graduate Studies  
The University of Western Ontario  
London, Ontario  
September, 1995**

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## **ABSTRACT**

Can money buy happiness? Few psychological studies have systematically attempted to answer this question, although several have shown a small (.11 to .19) but significant correlation between income and quality of life. It is argued in this study that the relationship between income and quality of life is complex. Aspects of money that might affect quality of life were identified as money beliefs, money goals, appraisals of finances, financial situation and money behaviours. The study then focused on the money beliefs aspect. Money beliefs were identified and described using a qualitative research paradigm. A scale of money beliefs (the Money Beliefs Questionnaire, or MBQ) was developed. Items describing various beliefs were administered to 210 adults. Factor analysis was employed to establish which beliefs were most reliably measurable, and the selected items were cross-validated with 336 university students, then 236 adults. Five beliefs about money were established. These were that money is for security, power, luxuries, and itself, and that one cannot obtain enough money. The MBQ was compared to other money questionnaires with respect to response bias, confirmation of the factor structure, and the beliefs measured.

Structural equation modelling techniques were used to test a CMR model of money, money beliefs and quality of life. For two adult samples, the belief that money is for security was associated with higher reported quality of life, while the belief that one cannot obtain enough money had the opposite effect. It was

unresolved whether income influenced quality of life either directly or through its influence on beliefs, in that different results were obtained with each sample. The findings supported the notion that beliefs about money, rather than income itself, have a large influence on quality of life. Suggestions were made regarding the role of money beliefs in the study and treatment of compulsive spending, possible future research to establish the roles of money goals, financial appraisals and money behaviours, and future testing of social comparison explanations of the money/quality of life relationship.

## **DEDICATION**

**To Mom**

## **ACKNOWLEDGEMENTS**

Many people were very helpful to me in the four years I spent working on this project. I regret that I cannot name them all, and trust that I have relayed my appreciation to those I have missed here.

I would like to thank my Advisor, David Evans, who let me go off on this wild goose chase after money beliefs, and helped me shape the project into something I could manage to complete, and to gain approval for. Looking to other students' experience, I have seen that getting a good Advisor is half the battle in completing a dissertation, and I count myself lucky to have drawn David.

Thanks go also to Nick Kuiper and Sam Paunonen, members of my Advisory Committee, who provided invaluable comments and suggestions at critical points along the way. And to Doug Baer, who generously opened his graduate course on structural equation modelling to Psychology students, and who gave freely of his time and advice as I struggled to get EQS working.

It is possible that, collectively, the subjects who participated in this work spent as much time on it as I did. To them, especially friends and associates who revealed their experiences to me in the qualitative study, I am most grateful.

There are some whose support was vital to my persevering with this task. Darcy Jones, a constant companion and confidante, whose own courage inspired me. Lynn Cooper, whose comforting encouragement helped me carry on when I was daunted. And Ryon Bateman, who admired me (I love that), and helped me to organize the whole thing.

Finally, I would like to acknowledge that there is a lot more to learn about money beliefs and much that I have overlooked here. I trust that future scholars will address that lack.



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## CHAPTER 1

### INTRODUCTION

Does money buy happiness? This question is more complicated than it at first appears. What do we mean by happiness? What is money? Does money buy happiness directly? What does money buy that leads to happiness? For whom? These questions are intriguing in their own right, and more so because they have received such scant attention from psychologists. It is only within the past two decades that psychologists have begun to study the relationship of money and happiness; very few have suggested comprehensive models of what the relationship might entail. The purpose of this thesis is to answer some of the questions by providing a set of empirically derived models that depict the relationship between money, money beliefs and happiness.

Many components intervene in the relationship between an individual's environment and his or her happiness - goals, beliefs, attitudes, appraisals, coping processes, and personality all have their effect. The results of the current research suggest that the relationship between money and happiness is complex, and is influenced by a person's personality, money goals, money appraisals, money behaviours and money beliefs. All these dimensions must be understood to explain completely the relationship between money and happiness, but few of them have been conceptualized and measured by psychologists. The specific focus of this research was on just one piece of the puzzle -- money beliefs. This work begins to answer the question of whether money buys happiness by showing that beliefs about money have far more to do with happiness than does money.

There are pragmatic reasons why the study of money is important. The past twenty years have seen a growing recognition of behaviour problems with money, the nature of which suggest that a psychological approach to understanding and dealing with the problems may be useful. Case reports of compulsive spending are more common (Glatt & Cook, 1987; Krueger, 1988; Maddux & Poliakoff, 1992; Winestine, 1985), and a growing number of

researchers and practitioners concern themselves with understanding and treating people with complaints of this new "addiction" (d'Astous, 1990; Faber, 1992; Faber & O'Guinn, 1989; Hanley & Wilhelm, 1992; Krych, 1989; Rook, 1987; Scherhorn, 1990). A corollary, but no less disruptive concern is the increase in consumer debt (Lunt & Livingstone, 1992; Tokunaga, 1993) and a concomitant increase in personal bankruptcies (Clare, 1990), the consequences of which are increased emotional and personal distress (Hatcher, 1994; Mason, 1992). Further, financial troubles have long been recognized as a source of marital difficulty (Conger et al., 1990; Komarovsky, 1946; Pittman & Lloyd, 1988). Hence, a knowledge of the role of money and money beliefs in determining quality of life is important to practitioners.

In this chapter, a brief explanation of terms will be followed by a review of research that has been performed on the relationship between money and quality of life and the social comparison theory that has been put forward to explain that relationship. Next, a cognitive-motivational-model (Lazarus, 1992a) is briefly explained and put forward as the framework within which to study money. Within the framework, money beliefs are identified as the focus of this research. A review of the literature on money beliefs follows, which establishes the need for the work described in the subsequent chapters.

### Definition of terms

#### Money

What is money? "One of those concepts which, like a teaspoon or an umbrella, but unlike an earthquake or a buttercup, are defineable primarily by the use or purpose which they serve" (Weinstein, 1982, p 7). Historically speaking, in replacing barter, money has become the condensed form of one's claim to the wealth of the community, and is usually defined as such - a medium of exchange and a store of wealth. Simmel (1991) pointed out that money freed human beings to infinite exchangeability of possessions, but also confined them to a social system in which money can be exchanged. Money, by serving as a common yardstick,



allows infinitely different objects to be measured at equal units of potential satisfaction. Thus, money has the potential to symbolize and to purchase everything -- even human life (for example, in surrogate motherhood, life insurance policies, criminal contracts for murder, etc.) (Heilbroner, 1958; Stacey, 1982; Sussman, 1991). The focus in the current research is on identifying which, of the myriad possibilities money represents, are commonly endorsed in this culture. In other words, what do most people believe money is for?

### Quality of Life

What is happiness? Psychologists equate happiness with quality of life, subjective well-being, or satisfaction with life.<sup>1</sup> These concepts encompass a cognitive assessment of satisfaction coupled with a sense of emotional well-being. What we know of quality of life has grown from the research on social indicators and aging and from empirical studies, rather than from a previously established theoretical base (see Ryff, 1989; Shye, 1989). In general, the research strategy has been to gather ratings on various life domains to which humans generally refer in assessing whether they are satisfied.

The number and nature of the domains of subjective well-being are still being established. For example, Kammann and Flett (1983) identified ten components of happiness as: confluence, optimism, self-esteem, self-efficacy, social support, social interest, freedom, energy, cheerfulness, and thought clarity. Emmons (1989) suggests that people seek to fill needs for: (1) safety, predictability and control; (2) social approval, intimacy and belongingness; and (3) self-esteem, competence and mastery. Novacek and Lazarus (1990) put forward broad goals of power, achievement, affiliation, personal growth, altruism, stress avoidance and sensation-seeking. Poloma and Pendleton (1990) would add religious needs to the above dimensions. The domains used generally reflect the

---

<sup>1</sup> These terms may be used interchangeably throughout, though the discussion generally refers to global construct of quality of life, which comprises life satisfaction and positive and negative affect.

postulates inherent in a number of psychological theories of positive psychological functioning, such as those of Maslow (1968), Rogers (1961), Jung (1933), Murray (1938) and others. In summary, the domains tend to include: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989a).

Subjective well-being is generally said to be a combination of positive and negative affect and a global overall cognitive assessment of satisfaction with life (Chamberlain, 1988; Diener, 1984; Evans, 1994; Pellizzari, Evans & Callard, 1995). Positive and negative affect may operate independently of each other, and largely represent the day-to-day experience of life (see, for example, Bradburn, 1969; Chamberlain, 1988; Reich et al., 1988; and Warr et al., 1983). The overall appraisal of satisfaction with life compares experience with some standard or expectation and is seen as being a more long-term appraisal of contentment (Andrews & Withey, 1976; Cheng, 1988; Emmons & Diener, 1985). Also, a cognitive global assessment may be derived from a comparison of one's self to others, while the affective assessment tends to be derived from one's consistent affective experiences (Veenhoven, 1991).

While the focus of this research is on money, it is important to note that a number of attributes have been shown to predict quality of life. Reviews (Diener, 1984; Evans, 1994) suggest that factors such as income, age, race, employment, religion, social networks and marital status predict quality of life, although findings are mixed as to the extent of prediction. Findings are mixed as well about the influence of more subjective factors, such as perceived health, marital satisfaction, and financial satisfaction.

## Income<sup>2</sup> and Quality of Life

Does income correlate with quality of life? Two approaches have been taken in inspecting this relationship: the object of one is the correlation between income and quality of life, the object of the other is the effect of changes in income over time as they affect quality of life. (A third approach focused on the relationship between income and quality of life across countries, and is discussed under social comparison theory.)

A great many studies show some sort of correlation between income and quality of life. Some indicate that the correlation between income and quality of life can be as high as .24 to .32 (eg., Adelman, 1987; Baruch and Bennett, 1986; Crider, Willits and Kanagy, 1991; Diener et al., 1985; Groenland, 1990; Mugenda et al., 1990). More studies indicate a correlation ranging from .11 to .17 (Brinkerhoff & Jacob, 1986; Campbell, Converse and Rodgers, 1976; Costa et al., 1987; Diener, 1984; Diener et al., 1985; Diener, Sandvik, Pavot and Diener, 1992; Ellison, Gay and Glass, 1989; Emmons & Diener, 1985; Pittman and Lloyd, 1988). There are studies, too, which show no or very small correlations between income and quality of life (Beiser, 1974; Diener and Fujita, 1994; Inkeles, 1993; Michalos, 1985).

The effect of changes in income over time have not shown a consistent correlation with quality of life. Diener, Sandvik, Pavot and Diener (1992) found that relative changes in income over 10 years did not correlate with quality of life. This matched Easterlin's (1975) finding that the average level of happiness in the United States did not change substantially from 1946 to 1970, although average income increased by over 60% (adjusted for inflation and taxes). A follow up by

---

<sup>2</sup> Note that "income" has been substituted for "money" here. Most research uses income to represent the broader concept of wealth which, of course, encompasses income, expenditures, assets and debts. That short-cut is taken in the studies reported here; income is more easily understood by subjects, and measured. The need for a more complete measure of net wealth is discussed later.

Inkeles (1993) which included a number of first and third world nations, had similar results, except that those countries which had experienced marked increases in wealth had populations who reported greater daily satisfaction. As for negative changes in income, disruptions in income have been associated with a loss of well-being (Feather, 1989; Veenhoven, 1991; Warr et al., 1985). However, Umberson (1993) has shown that the predictive value of income on subjective experience of distress is reduced when variables measuring beliefs about control and vulnerability are entered into the regression equation.

In summary, then, it seems reasonable to assume that, at least for a Canadian or U.S. population, an estimate in the range of .11 to .17 for the correlation of income to quality of life at any point in time is reasonable. The lack of consistent evidence about the effect of changes in income precludes drawing any causal inferences about that relationship. In explaining these findings, one psychological theory, social comparison, has been consistently used by psychologists.

#### Social Comparison and the Income/Quality of Life Relationship

In its original form, social comparison theory had as its central postulate the argument that individuals are driven to compare their opinions and abilities, capacities and limitations against other standards. In the absence of objective, physical standards, we look to others for a basis of comparison. Festinger (1954), who originated the theory, elaborated on it by suggesting that individuals prefer to compare themselves with similar others, because this affords a more precise measure of abilities (thus, groups enforce their own norms, facilitating comparisons). Also, an inherent pressure to improve one's self means that one strives to become slightly better than the reference group (this explains competitiveness).

More recent developments have been to show that social comparisons may be used for self-enhancement as well as for self-evaluation or self-improvement. If the goal is self-improvement, one makes upward comparisons -- to those better

than one's self. If the goal is self-enhancement, one makes downward comparisons -- to those worse than one's self. Also, one's level of aspiration depends on one's reference group, so for example, a person surrounded by those with lesser ability will have higher self-esteem and be more ambitious than one surrounded by people of greater ability. (For reviews of social comparison theory, see Goethals, 1986; Suls & Wills, 1991; Wood, 1989.)

From an economic viewpoint, there is a school of thought which argues that the amount of income one needs to sustain well-being is relative, not to one's own needs, but to the amount of income earned by one's neighbours. The nineteenth century economist, Veblen, was one of the first to identify it when he discussed the role of 'conspicuous consumption' (Lea et al., 1987, p. 504). In the 1940's, Duesenberry provided a more modern economic model showing that the goods individuals consume are determined by the goods consumed by their reference group(s) (Lunt & Livingstone, 1991).

In psychology, there have been one correlational and four cross-cultural studies of the social comparison effect on the relationship of income and quality of life. Mookherjee (1992) compared the predictive value of a number of demographic variables to life satisfaction, including a measure of financial status which was determined by social references. Subjects were asked, "Compared with American families in general, would you say your family income is far below average, below average, average, above average or far above average?" (p. 516). This latter measure had a higher correlation with life satisfaction, at .326, than did income, suggesting that, when income is judged satisfactory by comparison to others, this correlates to quality of life.

Easterlin (1974) compared happiness surveys from 30 nations, and found that, within each country, individuals with higher incomes were consistently happier than those with lower incomes. However, those in richer countries were not happier than those in poorer countries, nor were the citizens of one country happier at a point in time when they had higher incomes than when they had lower incomes. Easterlin explained this finding by suggesting that individuals

adjust their needs for money within a society by reference to their peer groups. Thus, if all become richer, one is not comparatively better off, so would not be happier. Inkeles' (1993) report, using a broader sample of countries, included similar conclusions, although, "in country after country I found the proportion happy and satisfied among the rich versus the poor to be much the same." (p. 12)

Veenhoven (1991) used a data analysis methodology similar to Easterlin's, using data from 1975 to 1985, and reported different findings. In half the countries surveyed, more income for the individual did not mean more happiness. However, in the other countries, income was related to happiness; the relationship seemed to hold for impoverished nations, or those with wide discrepancies in the wealth of individuals. Veenhoven argued against relativistic notions of happiness on the grounds that they ignore the emotional component of quality of life; the fact that basic needs are not relative but absolute, and their fulfilment results in happiness; and the existence of internal standards against which individuals assess their satisfaction with life.

Finally, in their cross-cultural study, Diener, Diener and Diener (1995) hypothesized that, across 55 countries, those countries with richer neighbours would have lower subjective well-being and vice versa. The results showed the opposite. Further, based on social comparison theory, they suggested that subjective well-being would be lower in those countries with negatively skewed income, because more individuals within those countries would compare poorly with those acting as the reference group. Similarly, they argued that a larger variance in income would correspond to a larger variance in subjective well-being across countries. Results did not bear these hypotheses out. Moreover, it was found that the effect of income on subjective well being was not influenced by past income levels.

The relationship of income to happiness has not been well explained by social comparison theory. This is probably because, as Veenhoven (1991) recognized, the internal processes so important to the theory have not been adequately measured, so the effect of differences among individuals' aspirations,

assessments and reference groups is not known. Only when these factors have been accounted for, will it be possible to assess whether social comparison explains the obtained relationship between income and quality of life.

### **Mediators of the Income/Quality of Life Relationship:**

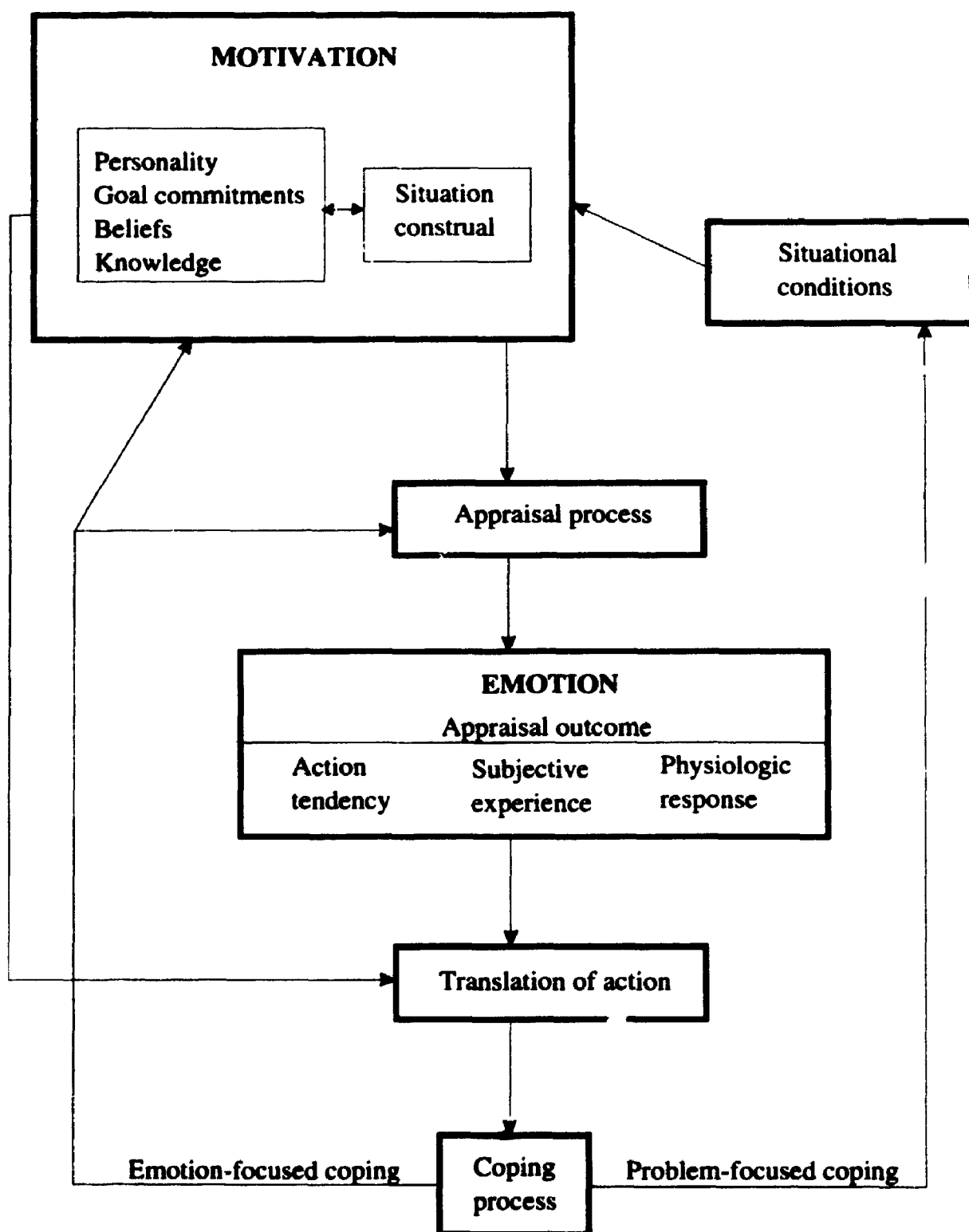
#### **A Cognitive-Motivational-Relational Model**

The foregoing discussion indicated that the relationship between income and quality of life is small. The next portion of the discussion will suggest that, as alluded to by social comparison theory, there is more to the relationship than a direct correlation suggests. The question, then, is how to map out this expanded relationship. A comprehensive theoretical framework of human motivation is needed. This can help explain and identify the potential aspects of the human experience of money and the role they play in quality of life. Here, the framework selected is the cognitive-motivational-relational (CMR) framework developed by Lazarus (1991a, b & c). Lazarus' framework is one of few which integrates cognition, emotion, motivation, behaviour and the environment.

In the next pages, the CMR framework, illustrated in Figure 1, will be outlined. The framework of the model is then adapted to apply to income and quality of life. Examples from the emerging literature illustrate how the components of the model might work but, more than that, show how much is yet to be done for a complete understanding of the issue. Thus the context is provided for the research which is reported in the remaining chapters, the pursuit and examination of one component of the model, namely, money beliefs.

#### **A CMR Model**

An illustration of the cognitive-motivational-relational model is shown in Figure 1. Lazarus (1991a) views motivation both as a personality trait and as a situational reaction. In his scheme, individuals each have a unique goal hierarchy, in which their more persistent efforts are devoted to achieving goals to which they are committed ("goal commitment"). Goals are distinguished from beliefs, in that



**Figure 1: Cognitive-Motivational Relational Model**

(Source: adapted from C.A. Smith and R.S. Lazarus, "Emotion and Adaptation." In L.Pervin (Ed.), Handbook of Personality: Theory and Research. NY: Guilford Press. Copyright 1990 by Guilford Press. Used with permission.)



one may hold, but will not necessarily act upon beliefs, but one does act upon goals. Goals serve the self, or ego-identity, which establishes and revises goal hierarchies and goal commitments in the context of the environment. It is the combination of the personal goal commitment hierarchy and the environment which creates motivation, because the situation, or environment, elicits different goals.

Emotion (which, for the purpose of this paper incorporates quality of life) represents the reaction to the cognitive appraisal of relationships of the self (and its goals) with the environment; emotions then trigger coping processes, which can act to change the relationship or to modify the appraisal of the relationship.<sup>3</sup> Coping processes thus influence, and are influenced by, emotions, appraisals, and motivations. With appraisals, the individual considers whether a situation is relevant to well-being, if it is congruent with goals, and which types of goals are affected. The individual then considers the implications of the relevance to goals, how to apportion blame, adjust future expectations, and select from potential coping options. Lazarus (1991a, b) distinguishes appraisals from knowledge; knowledge is one's set of beliefs about the world, while appraisal is an evaluation of the personal significance of those beliefs. Lazarus argues that individual differences in appraisals of the person-environment relationship are influenced by learning and culture, but similar appraisals lead to similar emotions, regardless of differences in the individuals or situations which elicited those appraisals.

Culture and social structure affect emotion by shaping the factors in the emotion process - the goals, beliefs and goal hierarchies that an individual will acquire, and thus the primary appraisals, and also how blame or credit is assigned, what coping procedures are sanctioned, and beliefs or expectations about the future that comprise the secondary appraisal process. Culture is the broad

---

<sup>3</sup> Lazarus makes broad assumptions about the causal relationship between cognitive and affective processes. The question of whether cognition precedes emotion or vice versa has been debated by psychologists for a century and is unresolved (see, for example, Heckhausen, 1991).

commonality of meanings that are ascribed to physical reality and social symbols. The influence of culture and social structure varies from individual to individual because of differences in experience and, possibly, temperament.

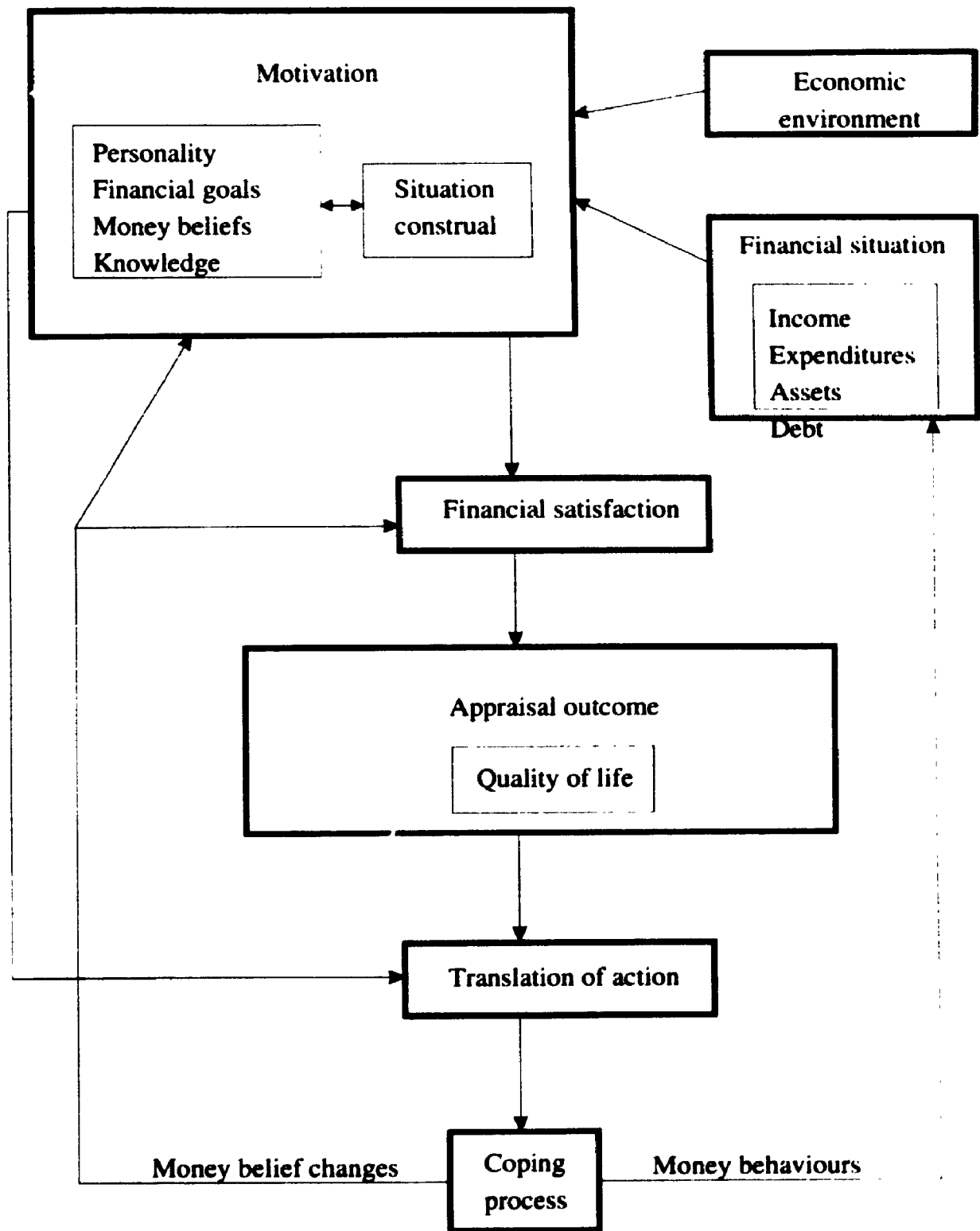
### A Cognitive-Motivational-Relational Model of Money and Quality of Life

Figure 2 illustrates how the CMR framework can be adapted to describe money and quality of life. In summary, an individual would hold various beliefs about money. This knowledge, or these beliefs, formed through the individual's learning experiences in the context of the culture and social structures, would be incorporated into the individual's goal hierarchy, with acquisition or disposition of money either as a goal in itself, or as a means to attaining some other goal. The goals and goal hierarchies would be revised in the context of situational changes in the individual's financial status, for example, changes in income or wealth. Cognitive appraisals of the relationship between the individual's goals and the financial situation would influence quality of life and, in turn, coping processes.

The usefulness of this model lies partly in its organizing function. Using the model as a framework, what is known about the internal processes having to do with the income/quality of life relationship can be discussed. This discussion of the cognitive-motivational-relational model of income and quality of life shows that much remains to be discovered about those processes. It should be noted that quality of life, as defined earlier, is not equivalent to the emotion of happiness as Lazarus (1991a) uses the term. Here, quality of life is a summation of a number of emotional states and a cognitive assessment of satisfaction with life. As such, it reflects a more stable tendency or mood rather than a specific emotional state being experienced by an individual at a point in time.

### Goals

According to Lazarus' framework, beliefs about money must be incorporated into an individual's goal hierarchy. Acquisition or disposition of money might appear in this hierarchy either as a goal in itself, or (given the nature of money) as a means to attaining some other goal. The individual would be



**Figure 2: A Cognitive-motivational-relational Model of Money**  
 (Modified from C.A. Smith and R.S. Lazarus, "Emotion and Adaptation." In L. Pervin (Ed.), *Handbook of Personality: Theory and Research*. NY: Guilford Press, 1990.)

more or less committed to each goal, and goals would deal either with the short-term or the long-term. There are a few studies on money goals (discussed below). They can be interpreted only with caution because few of the potential factors that influence money goals were actually incorporated into the studies cited. For example, none of the studies cited investigated the beliefs that individuals held about money, nor whether these beliefs motivated their pursuit of it.

Diener et al. (1995) and Diener and Fujita (1994) have argued that a relationship between quality of life and income is expected because income allows individuals to meet their goals. Because individual goals differ, income correlates weakly with quality of life. Diener and Fujita's study was designed to test the hypothesis that resources relevant to individual college students' goals would be more predictive of quality of life. However, the finding that money and material possessions were not relevant to their subjects' goals and did not correlate strongly with quality of life, left open the question of whether this hypothesis explains the small correlation of income to quality of life.

Another study in which the nature of individuals' goals of money was explicitly examined was that of Fournier and Richins (1991). In their survey of 29 subjects, they identified the acquisition of money as a goal in and of itself, in addition to being a goal for the purpose of acquiring other possessions.

Other researchers have obliquely identified individuals who subscribe to goals of obtaining money, in studies designed to explore some other factor of interest. These works provide some evidence as to the type of person who seeks money as a goal. For example, univariate analysis of variables with measures of work ethic, mastery, competitiveness, attitudes to savings, valuing of money, and achievement motivation showed that men were more likely to value higher salaries than women, as were older subjects (Kirkaldy et al., 1992). However, a study of minimum needed incomes by DeVos and Garner (1991) showed through a regression analysis that the difference between those with higher and lower needed incomes was the level of education (not age, disability, race, gender or religion).

### Appraisals

Under Lazarus' (1991a) model, the cognitive appraisals of the relationship between the individual's goals and the environment are predicted to trigger emotions and coping processes. These appraisals are most easily demonstrated in studies (discussed below) which have looked at changes in the environment and consequent changes in subjective appraisals of money. These studies seem to demonstrate that changes in the economic environment do not bear a one-to-one relationship with changes to appraisals of the economic environment. This, in turn, suggests that previously held beliefs and goals, as well as the current environment, influence economic behaviour and, in turn, quality of life. A second group of studies has shown that measures of satisfaction with financial status predict quality of life, but have not explained the basis on which these appraisals were made.

Subjective appraisals have been found to have more influence than actual events on changes in economic behaviour. This was Epstein and Babad's (1982) conclusion in their study of the effect of inflation on economic behaviour for 504 Rutgers alumni of various income levels. Analysis of variance showed that changes in economic behaviour (consumption and savings) and the perception of stress changed in association with the subjective experience of inflation, rather than with changes in income levels.

The appraisal of economic conditions, rather than economic conditions themselves, may also drive the experience of well-being. For example, DeVos and Garner (1991) reported that, even though their income levels were similar, "households which had recently suffered a considerable decrease in their incomes report significantly higher minimum income than do households with stable income." (p. 279). Studies have also shown that it is not income, but perceived financial stress which is associated with marital quality (Brinkerhoff & White, 1978; Conger et al., 1990; Pitman & Lloyd, 1988; Schaninger & Buss, 1982).

Some researchers, in pursuit of broader research questions (usually the identification of which life domains predict quality of life), have measured

satisfaction with income and compared it to quality of life. It has been demonstrated in a number of these studies that a measure of satisfaction with income (or financial status) has a higher correlation with quality of life than does income (Berry & Williams, 1987; Bubolz et al., 1980; Groenland, 1990; Headey, 1993; Mugenda et al., 1990). Estimates of the correlation of financial satisfaction with quality of life in these studies ranged from .20 to .41, with the concomitant income/quality of life relationship reduced to insignificance. Along similar lines, Pittman and Lloyd (1988) found a negative correlation of financial stress and satisfaction with life of -.13. Other studies have included satisfaction with income and other predictors in multiple regression models of quality of life, and found that satisfaction with income or standard of living has been one of the significant predictors, accounting for 2% to 15% of the variance in quality of life (Andrews & Withey, 1976; Campbell, Converse & Rodgers, 1976; Near & Rechner, 1993; Richardson & Burke, 1993; Shin & Johnson, 1978).

With the exception of the studies by Groenland (1990) and Headey (1993), a problem with this line of research has been that a single item measure of satisfaction with income was used in the studies, which impairs the reliability of the estimates. Again, there was no measure of financial goals or beliefs to enable interpretation of how these appraisals were made. Nevertheless, these studies support the notion that positive appraisals of financial status are positively correlated with quality of life measures and, for a Canadian or American population, the correlation seems to be around .30 to .40. Also, financial satisfaction is a better predictor of quality of life than income, to the point, perhaps, of eliminating the predictive power of income measures.

### Coping Processes

Coping processes enable the individual to deal with incongruence between desired goals and reality. There is little direct information on how individuals cope with goal incongruence having to do with money. Perhaps the most common example of such goal incongruence would be a financial set-back such as a job loss. There have been numerous studies of the reaction to financial setbacks,

showing that such setbacks can lead to, among other things, increased depression, decreased subjective well-being, or decreased marital satisfaction (Ganzini et al., 1991; Glickman et al., 1991; Ross & Huber, 1985; Zvonkovic, 1988). Presumably, these adverse effects are the consequence of failure to cope adequately, yet this aspect of setbacks has not been explicitly examined.

### **Beliefs**

Finally, there are beliefs about money, the focus of this dissertation. In the context of the cognitive-motivational-relational framework, beliefs about money are the basis on which the individual creates goals and a hierarchy of goal commitments. An individual acquires beliefs about money in the context of experience, culture and within social structures. From a psychological viewpoint, then, what do people believe about money? In other words, what does money mean? There have been primarily two theoretical approaches to identify beliefs about money: the psychoanalytic approach and the symbolic approach. In addition, some researchers have used an empirical approach to derive money beliefs.

**The psychoanalytic approach.** Psychoanalytic theory explains attitudes toward money as deriving from early childhood experiences. Early psychoanalytic theorists conceptualized the quest to amass money as deriving from repressed conflicts experienced during the anal stage. Money, symbolizing one's first possession -- faeces<sup>4</sup>, was sought by an individual to help him or her withstand the threats to power, possession and security experienced at the age of being toilet-trained. The anal character, therefore, was described as being obsessed with money, time, work and value (Fenichel, 1938; Halliday & Fuller, 1974).

With the development of psychoanalytic theory, less emphasis was placed on filth, and more emphasis on the power that money symbolized. Wiseman

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<sup>4</sup> Freud is often credited with making the link between money and faeces. The association of excrement with lucre dates back at least as far as the 13th and 14th centuries, where it was prevalent in medieval imagery (Little, 1978).

(1974), for example, explained that the lure of money lay in its relationship with power. The infant is born into a relationship of inequality, both financial and otherwise. The basic unequal feeling that the individual experiences persists throughout childhood and into adulthood. As an adult, the individual attempts to dominate others by gaining access to money, believing that financial independence will remove that core feeling of dependence. Of course, it does not, because it cannot alter the individual's past.

More recent developments in psychoanalytic thought have included suggestions that the emotional meanings attached to money are more varied, and stem from different developmental periods (Klebanow & Lowenkopf, 1991). Hallowell and Grace (1991), for example, suggest there are four basic personal styles with respect to money. For the enthusiast, money symbolizes power, freedom and self esteem; for the spender, it is action and freedom; for the under-involved, money evokes anxiety and avoidance; and for the sceptic, money represents security and control. Money might also be invested with masculinity (Gould, 1991).

An offshoot within the psychoanalytic framework, object relations theory, has a slightly different approach to money. Here, it is argued that money has psychological meaning because it allows one to express the self (Belk, 1988; Dittmar, 1992; Luepnitz, 1988; Simmel, 1991/1901). Object relations theory, or self-psychology, stresses very early developmental psychological needs. Infants cannot initially distinguish between themselves and others in the world, but establish a sense of self and of others, and patterns for relating to the world, based on their interactions with caretakers. The infant invests these significant others with aspects of the self, and such investiture can also take place with objects (Baker & Baker, 1987). Possessions can become early embodiments of the infant's desire (Kovel, 1981). Even after the child separates external from internal reality, "he continues to endow outside things with the magical property of being part of himself" (Heilbroner, 1958, p 18).



An adult's search to use money or possessions for symbolic self-completion, while it may originate in infantile irrational thinking, is thought to be a realistic means of ego support in adulthood. Dittmar (1992) argues this position, by interpreting Mead's theories to suggest that we see ourselves through others' eyes and find our identity in others' reflections of us. The appraisals of this "generalized other" are based on the clues we offer them about ourselves via our possessions -- clothes, cars, houses, etc. Through socialization, we come to understand common symbolic meanings of various possessions and to compose our own identity using these. Dittmar and Pepper (1994) have demonstrated that college students evaluate people more positively if they are seen to be wealthier.

The major drawback with psychoanalytic writings on money is that they offer little by way of empirical evidence. Assertions are based on therapeutic experience and, occasionally, are backed by anecdotal evidence drawn from case studies (eg., Forrest, 1990). Psychoanalytic theory is rich in possibilities to account for how money acquires emotional significance, and provides character analyses of individuals that fit well within the psychoanalytic framework. It fails to explain, however, the nature of the relationships between developmental and emotional experience and beliefs and behaviours to do with money. The object relations approach has rather more empirical support for its view of the use of possessions (see Dittmar, 1992). Proponents of the approach have demonstrated, at least for some populations, that possessions carry symbolic meaning. However, the scope of the studies has been limited to only a few of the possessions that an individual would normally hold, so results may not generalize to an individual's total wealth.

The symbolic approach. The symbolic approach to money, is Doyle's (1992a, b) recent conceptual framework for understanding what money means. The underpinning for his framework is that the human individual is fundamentally lonely, and is motivated to relieve the existential anxiety which stems from this dilemma. Drawing from ancient mythology, religion, philosophy, medieval science and, more recently, the works of Jung, Adler, Kefir and Maslow (among others), Doyle suggested that there are four basic personality types. Each type has a

characteristic way of dealing with anxiety, and each type sees money in a symbolic way to ward off fears.

Doyle's (1992b) four money personalities are as follows. The Driver has learned to use achievement to avoid isolation and rejection and "uses money as a talisman against the fear of being found incompetent, spends money on things that will "prove" his or her success to other people ... and use of money for competition" (p. 717). The Amiable uses relationships to avoid isolation, uses money to ward off abandonment, and saves money or is generous with money to hold on to people. The Analytical uses order to avoid isolation, uses money as a charm against loss of control, saves money to protect him/her against threat, and tends to be frugal and cautious with money. The Expressive has learned to use appearances to ward off isolation, uses money to ward off loss of esteem, and spends money to buy respect and indicate his/her access to privilege.

Doyle's (1992b) approach has the advantage that it draws from a broader base of personality theories, and thus fits the use of money more deeply within our understanding of the internal processes associated with human activities. He also provided a framework for dealing with psychopathologies associated with money, and suggested how individual differences in development might influence the meanings one attaches to money. Some drawbacks are that, although Doyle suggested a procedure for testing his theory, no substantive work has yet been performed to evaluate it.

The two theoretically driven approaches to identifying beliefs about money are rich in possibilities for theoretical postulates of how personality and money beliefs might interact in relation to happiness, though neither have been put to that test. Also, both begin with a theory of personality, then suggest how certain beliefs about money might form within the context of that personality. In neither has there been an explicit attempt to first identify what the beliefs about money are, then fit those beliefs within their notions of character. The consequence of this is that one is left to wonder whether all possible beliefs about money have been identified.

**The empirical approach.** In addition to theory-based approaches, there have been practical attempts to identify the beliefs that individuals hold about money. Three different questionnaires have been developed to measure money attitudes. All used the method of factor analysis of items scored on a 7-point Likert scale to determine the possible constructs of money beliefs. Two, the Money Attitude Scale (MAS) developed by Yamauchi & Templar (1982) and the Money Ethic Scale (MES) developed by Tang (1992), have had little subsequent work to confirm or refute their adequacy. The third, Furnham's (1984) Money Beliefs and Behaviours Scale (MBBS), seems to have been used somewhat more extensively.

Yamauchi and Templar (1982) constructed initial items for their Money Attitude Scale by drawing from the works of psychoanalytic thinkers Freud, Fenichel, Klein, and Adler, and from the works of Abraham and Murray. Three broad content areas were described by the items, security, retention and power-prestige. An initial pool of 62 items scored using a 7-point Likert scale was administered to 300 subjects of various income levels. Using principal components analysis, 34 items were identified as having a loading of .40 or greater on a specific factor, accounting for 34% of the variance. In the final development of their questionnaire, Yamauchi and Templar used 29 of these items describing four factors: power-prestige, time-retention, distrust, and anxiety.

Tang (1992) derived his Money Ethic Scale by developing 50 items based on the literature on need fulfilment, positive and negative aspects of money, management of money, and the use of money for power. A principal components factor analysis was performed on the data obtained from administering the items to 249 subjects with full-time work experience. Six factors and 30 items were selected with loadings of .40 or greater, to account for 43% of the variance. The derived factors indicated that money was: good, evil, a sign of achievement, a source of esteem, to be budgeted, and a source of freedom and power.

Furnham's (1984) Money Behaviour and Beliefs Scale (MBBS) was developed using 60 items drawn both from Yamauchi and Templar (1982), and

from Goldberg and Lewis' (1979) work, which proposed that meanings attached to money include power, security, freedom, love and personal satisfaction. Items were administered to 256 adults, and a principal components analysis led him to select 47 items with loadings of greater than .40, and accounting for 35% of the total variance. The six factors those items represented were: obsession, power/spending, retention, security/conservative, inadequacy, and effort/ability.

Attempts to replicate the MBBS have not met with success. Wilhelm, Fridrich and Varcoe (1992) administered 38 items from the MBBS to 858 adult subjects using a 5-point Likert scale (no rationale was given for the reduction in items). Their factor analysis, solving for six factors, showed 27 items loading on the same factors as the original questionnaire. Bailey and Lown (1992) administered the original 60 items of the MBBS to 654 adults in the U.S.A. Their factor analysis identified only two reliable factors: Spending and Saving. Bailey and Gustafson (1991) administered 43 of the items on the MBBS to 472 university students (four items were eliminated because an earlier study had found that these items had low factor loadings). Their factor analysis yielded only three interpretable factors: obsession and retention, which were composed largely of the same items as the MBBS; and inadequacy, which was composed of items from a number of scales on the MBBS. To this author's knowledge, there has been no formal confirmatory factor analysis of the MBBS to determine the goodness of fit of Furnham's model with data obtained from another subject population. Also, none of the studies reported above contained sufficient detail to assess the extent of the differences from Furnham's solution.

There are three principal limitations to the MES, MAS, and MBBS. The first limitation is that the questionnaires seem to have been developed without explicit recognition of the different dimensions of attitude, namely, the cognitive, conative and affective components. The items on the questionnaires contain a mixture of beliefs, behaviours, and emotions, and the MBBS and MAS are comprised mainly of behaviour items. For example, items read, "I sometimes buy things that I don't need or want to impress people", (Furnham, 1984, p.504) and,

"I sometimes boast about how much money I make" (Yamauchi & Templer, 1980, p.523). Social psychologists have clearly demonstrated that the correlation between beliefs and behaviours is far from perfect, and it can be inappropriate to infer a specific belief from an observed or reported behaviour (Ajzen, 1988). Thus, one can argue, particularly for the MBBS and MAS, that because the items in these questionnaires deal mostly with behaviours, they are not, in fact, money belief questionnaires<sup>5</sup>.

The second limitation is the failure to recognize, in constructing the questionnaires, the general principle that measures, "will have broad import and substantial construct validity to the extent, and only to the extent, that they are derived from an explicitly formulated, theoretically based definition of a trait" (Jackson, 1971, p. 232). Unless money belief questionnaires are constructed using items representing the complete range of possible money beliefs, the resultant questionnaire may be limited, and the extent of the limitation would be indeterminate.

The third limitation of the questionnaires is that (other than three negatively keyed items in the MBBS) no attempt was made to make the necessary compensations for response bias in scale construction (Jackson, 1971). Response bias is the inclination to respond to items in a way that is not consistent with the respondent's reaction to the content of the item, but is consistent with some other cause. This bias must be accommodated in developing a questionnaire to ensure that the actual content is what is being measured. The bias toward acquiescent responding is typically controlled for by having items which are keyed in a positive way balanced by items which are keyed in a negative way.

The more difficult bias to manage is the tendency to respond in ways that are socially desirable. This response style seems to stem either from respondents'

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<sup>5</sup> A minor additional effect of mixing beliefs and behaviours is that, without any reported effort to ensure that all dimensions were balanced within the scales, items may have clustered together because they represented a behaviour (any behaviour) as opposed to a belief.

tendency to deceive themselves about the extent to which they conform to socially desirable beliefs, or respondents' tendency to wish to give the impression to others that they conform to socially desirable beliefs (Paulhus, 1991). This could be particularly contaminating in a questionnaire of money beliefs because money is, after all, a purely social construction (Moffat, 1983; Simmel, 1991) and its value lies in its social meaning. Thus, the beliefs one has about money (to the extent that certain money beliefs are socially desirable) may be influenced in some way by the extent to which one ascribes to socially desirable values and vice versa. In none of the three questionnaires was there any explicit recognition of potential problems with socially desirable responding.

In summary, then, the theoretical and empirical literature offers some suggestions as to what people might believe about money from a psychodynamic and symbolic framework, and indications of money beliefs can also be inferred from the MBBS, MES and MAS questionnaires. However, there is no definitive list of what people believe money is for, nor is there a measure of these beliefs which can be used for testing within the cognitive-motivational-relational framework.

### Summary

To obtain an answer to the question of how money relates to quality of life, one must be able to describe and measure the variables that intervene in that relationship. Using a cognitive-motivational-relational framework, a number of these variables have been identified. The research reported in the following chapters concentrates on one of these variables, money beliefs, as illustrated in Figure 3. The goals of this research were as follows.

- 1) To identify the range of beliefs about money that individuals might hold.
- 2) To use those identified beliefs, and appropriate psychometric procedure, to obtain formal measures of money beliefs.

- 3) With formal measures of money beliefs, to determine which beliefs, if any, would intervene in the relationship between income and quality of life, as predicted by the cognitive-motivational-relational model of motivation.

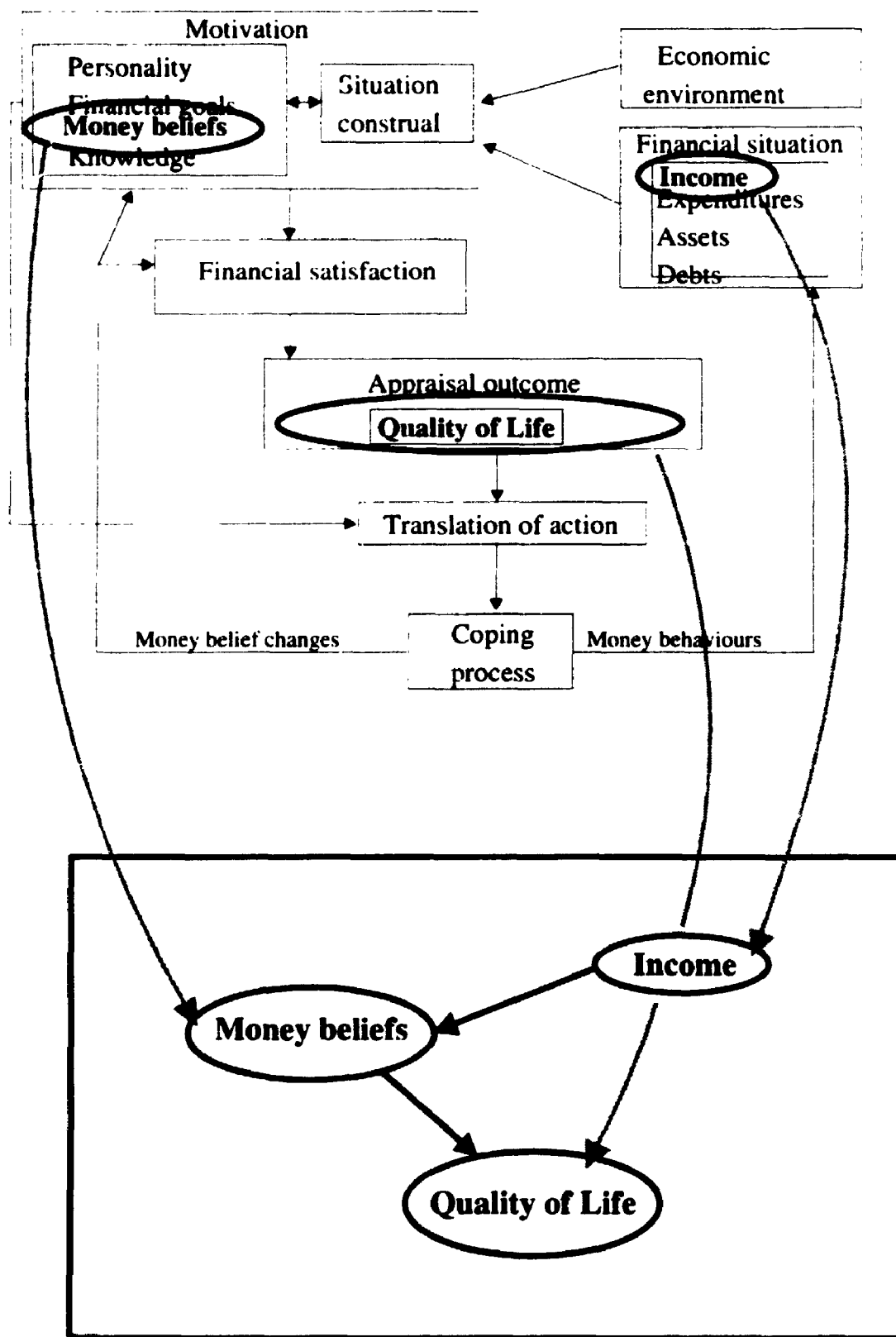


Figure 3: Cognitive-motivational-relational framework:  
Focus on Income, Money Beliefs and Quality of Life



## CHAPTER 2

### QUALITATIVE STUDY

This chapter sets out the results of an initial study conducted to establish the broad domain of money beliefs. Based on a review of the literature, past research on money beliefs was found to have been limited to roughly two types. In the first, psychologists, sociologists, philosophers and others had developed suppositions about types of beliefs about money, based either on personal experience (e.g., Heilbroner, 1958), or on derivation from a theoretical framework (e.g., Fenichel, 1938). In the second, psychologists attempted, using these speculations, to devise scales of money beliefs (e.g., Yamauchi & Templar, 1982). From a review of the literature, it was possible to construct a tentative list of beliefs about the intangible qualities money allows one to attain. The literature, however, contained little by way of empirical research on the identified beliefs. Some direct evidence was needed to verify that this list of beliefs was complete and congruent with beliefs that a Canadian population might hold.

A research initiative conducted from June, 1993 to February, 1994 addressed the question, "What are the beliefs about money that an individual in this society is likely to hold?" The primary aim was to give assurance that all the prevalent beliefs about money had been identified. This was done by conducting open-ended interviews with a small number of participants. A secondary aim was to gather subjective impressions of how money beliefs might affect wealth and subjective well-being, and behaviours with money.

Consistent with the primary aim of the research, which was to search for beliefs which might not have previously been identified, an inductive rather than deductive approach was followed in gathering and interpreting data. The inductive approach was preferred at the generative stage of the research, where the purpose was to discover and describe a phenomenon, rather than to verify principles by establishing and testing hypotheses (Henwood & Pigeon, 1992; Moustakas, 1990; Poplin, 1987). An open-ended approach was considered

necessary to ensure that no potentially useful information was lost or overlooked in the process of gathering or analyzing data (Hoshmand, 1989; Seidman, 1983).

## Method

### Participants

Twenty-eight participants were recruited by an informal network (Seidman, 1983). With one exception, participants were all acquainted with the author through a variety of social organizations. Because the aim of the study was to identify underlying cultural beliefs which all members of society have access to, the bias in selecting the group was considered less important than it might have been in a quantitative exercise. While more educated than the general population, the sample was varied as much as possible with respect to vocation, wealth, family structure, political affiliation, etc. To ensure sufficient experience with the handling of and responsibility for money, participants were recruited if they were older than 25, had been (if not at the time of the interview) gainfully employed, and had ceased to reside with their parents. Participants were selected on a 'negative case analysis' basis (Henwood & Pidgeon, 1992; Douglas, 1985), which means that they were recruited until it became apparent that little new information was being uncovered with each new participant. The number ultimately selected (28) was similar to the 15 to 25 reported by other researchers conducting similar types of research (Douglas, 1985; Henwood & Pidgeon, 1992; Mousakas, 1991).

The demographic characteristics of the participants are presented in Table 18 in Appendix 1. There were equal numbers of male and female participants; ages ranged from 25 to 68 years, and the average was 41. Half the participants were single or divorced, eleven were married, one was widowed and two were separated. Half were parents and half were not. As to the highest level of education, ten had a graduate degree, seven had a bachelor's degree, four had college diplomas, six had completed high school, and one had completed only part of high school.

## **Measurements**

Participants were interviewed following a semi-structured format. While the initial plan was to conduct interviews over two sessions, 17 participants completed the interview in one. The interviews took less than ninety minutes in over half the cases; the briefest interview took 50 minutes, and the longest, just over four hours. The interviews were tape-recorded.

The primary purpose of the interview exercise was to determine the participants' answers to the first question posed ("What is money for?"). The specific questionnaire used as a guide for the interview is included in Appendix 1; however, spontaneous diversions from the main body of the interview were encouraged (Douglas, 1985). Various aspects of money were probed with the expectation that more discussion might stimulate further, deeper responses by the participants to the primary question. The discussion touched on what the participants thought money was for, their experiences with and attitudes toward richness and poverty, socialization with respect to money, money in their family, monetary goals, and money behaviours such as saving, budgeting, gambling, and setting financial goals. Participants were also asked to discuss money and religion, sex-roles, and child-rearing and to speculate on reasons why it might be considered rude to discuss money. In fact, a number added categories to their lists later in the interview.

Financial information was requested and, to ensure accurate reporting, participants were asked to estimate and provide detailed information about their financial assets, liabilities, incomes and expenses. Twenty-six participants disclosed information about their finances and income. Wealth information is presented in Table 19 of Appendix 1. The annual income ranged from \$10,000 to \$280,000 and averaged \$40,264. Ten participants reported a negative net income, meaning that their estimated expenditures exceeded their revenues. The mean assets ranged from \$975 to \$3,007,900, with an average of \$262,000. The average net assets (total assets less total liabilities) was \$183,974, and five participants reported net debt. Mann-Whitney U-tests showed that there were no significant differences

( $p < .05$ ) between the males and females in the sample with respect to net assets, gross or net income.

Participants were also asked to complete the Satisfaction with Life Scale (SWL; Pavot et al., 1991). This is a five-item scale measuring overall satisfaction with life. Coefficient alpha reliabilities have been reported of .87 and .83. (Diener, Emmons, Larsen & Griffin, 1985; Pavot et al., 1991). Two participants declined to provide detailed financial information or to complete the Satisfaction with Life questionnaire. Both were older females.

#### Data Analysis - Interview Data

Taped interviews were transcribed -- half by the author as part of the process of immersion in the subject matter -- and half by a magnanimous friend. These latter transcripts were then reviewed in conjunction with tape recording to ensure the accuracy of the transcription. During the interviewing phase, the author recorded strong impressions made immediately after the interview (Wells, 1992). These notes and the transcripts were then reviewed and analyzed to distill the salient material. The material was organized, and the narrative was excerpted onto summary sheets (see example in Appendix 1). Also in the course of this review, potential questionnaire items were collected by adapting phrases that the participants had used in describing their experiences or attitudes.

Non-parametric statistics and correlations were used to explore possible relationships among participant characteristics, beliefs and behaviours. The Mann-Whitney U test is one of the more powerful non-parametric tests, when there are two independent samples measured on nominal scales, to determine whether differences in the sample give convincing evidence of a difference in populations (Olson, 1986; Siegel, 1956). A fairly low level of significance was used in interpreting the findings ( $p < .10$  for the nonparametric tests, and  $p < .01$  for the correlations) due to the exploratory nature of the research methodology.

## Results

### Money belief constructs

It was possible to distill ten constructs of money beliefs from the interview data. Participants had been asked to speculate about what money is for in general, and for themselves personally. What emerged from their answers to this question, and from the views they expressed in subsequent portions of the interview, indicated a variety of beliefs about the uses to which money is put. Using the material from the interview, and drawing on what was found in the literature about money beliefs, the following theoretical constructs were derived to describe what money is for. These constructs incorporated tangibles as well as intangibles obtainable with money.

#### **BASICS (bodily needs)**

With money, one can have the basics necessary to survival, such as food, shelter, clothing, medical care. One can support one's personal minimum customary standard of living. One can preserve one's physical being.

#### **FRILLS (fun)**

With money, one can have a style of life that includes more than what is absolutely necessary. One can have what one wants, rather than what one needs; those things which are for convenience, pleasure, luxury, leisure, fun or comfort. One can be rewarded with, for example, a bigger house, a better car, travel, a better wardrobe, entertainment, sports or hobby equipment, jewelry, etc.

#### **SECURITY (peace of mind)**

With money, one can have a feeling of security; the peace of mind that comes from the assurance that one has enough money. With money, one need not fear the consequences of not having enough money (for example, of going hungry or being on the streets or unprotected) and the anxiety that accompanies that. With money, one need not explicitly consider the monetary aspect of life decisions - one does what is needed without thinking about whether this will jeopardize one's financial stability. With money, one need not fear being poor in old age. This security rests on a basic trust in the social order.

#### **STATUS (social position)**

With money, people are held in higher esteem in this society; they are considered more deserving, important and respected. By displaying those

things which money buys, one can demonstrate that one has mastery of ability and skills, is making a contribution, has achieved success. With money, one gains prestige and is shown to be superior. With money, one can feel pleasure about meeting expectations - of one's self, one's parents, and one's society.

#### **POWER (over others)**

With money, one gains control, influence or that ability to manipulate the actions of others. One can sway decisions of groups or of individuals - either within the family, one's place of work, or in the political arena. With money, one is not answerable to anyone else. One gets better service in restaurants, banks, hotels, schools, hospitals, etc. People respond to and are intimidated by people with money. With money, one has purchasing power, to influence the workings of the economy. Examples of exercising power are the husband who tells his wife that she has no say in the household unless she brings home a paycheck, or the creditor who will not lend money to someone without a say in how that money is spent.

#### **INDEPENDENCE and FREEDOM (power over self)**

With money, one has control over one's own life and circumstances; one's choices are independent of the demands of others. Having money gives one flexibility, self-determination, and pride in one's autonomy. One is not trapped by circumstances, or vulnerable to others in one's family or place of work.

#### **RELATIONSHIP/SEX**

With money, one has more choice of mates. If male, one finds more females are available to one; if female, one is freer to select a mate with less wealth, or to refrain from mating. In a relationship, if one has one's own money, one need not be subordinate to the wishes of the other. With money, one can provide properly for one's family, see to it that family members have all their needs met. One can keep the family together.

#### **TIME**

With money, one has time to pursue one's own interests - hobbies and unpaid activities like artistic endeavours, activism, or charitable work. This is either because one need not spend time working to earn money, or because one can pay others to do one's work for one.

#### **ITSELF**

With money, one might not be satisfied with what one has. There is a fascination to getting money for its own sake, a thrill associated with obtaining, possessing, counting, and/or spending money.

## **TRANSFORMATION**

With money, one may be transformed. How one perceives the world, relates to other human beings, or structures one's values may change. With money, others may change toward one, revising how they perceive one, what they expect from one, and how they interpret one's behaviour. These transformations are suspected to involve the corruption of spiritual, or "higher" values.

The constructs named by the participants were ranked in order of their mention (see Table 1). The most common among the first three responses were: for status; to meet basic needs; for power; to provide luxuries; for security. Also mentioned were independence and freedom, self-esteem, for money itself, for family, sex, and time. Transformation, although not something obtained with money, was also mentioned as a consequence of having money. When participants were asked what they themselves wanted money for, similar responses were given. The priority changed somewhat, however. The first three items mentioned were: (1) to meet basic needs; (2) to obtain frills or luxuries, and (3) to have security.

### **Money Beliefs, Income and Satisfaction with Life**

There was no significant relationship between any measure of financial status (assets, net assets, income, net income) and the measure of satisfaction with life (SWL). The mean score for SWL was 22.24 out of a possible score of 35. The correlation between net assets and satisfaction with life, for example, was .11.

To explore the relationships among beliefs expressed in the interview and SWL or financial status, beliefs were ranked. For each participant, the beliefs s/he enumerated were ranked. It was generally assumed that the primacy of the appearance of the belief in the interview indicated the overall salience of the belief. However, the ranking was amended if the contents of the interview suggested a higher or lower salience. The results of a Kolmogorov-Smirnov one-sample test showed that some beliefs were more prevalent than others, but the sample size was not large enough to assess the significance of rankings.

**Table 1: Priority of responses to the question, "What is money for?"**

<b>Money is for ...</b>	<b>1st</b>	<b>2nd</b>	<b>3rd</b>	<b>Next</b>	<b>Total</b>
<b>Status</b>	6	7	5	8	26
<b>Basics</b>	11	5	1	8	25
<b>Luxuries</b>	3	3	2	17	25
<b>Power</b>	2	3	11	14	21
<b>Security</b>	4	2	2	12	20
<b>Independence</b>	-	1	-	18	19
<b>Family</b>	-	1	1	14	16
<b>Freedom</b>	-	1	2	12	15
<b>Itself</b>	1	1	1	10	13
<b>Transformation</b>	1	-	-	8	9
<b>Sex/love</b>	-	1	-	6	7



A correlation analysis was performed of ranked beliefs, SWL and wealth (Table 2). This showed no significant relation of beliefs and SWL. With respect to what participants believed they themselves wanted money for, two beliefs -- status and basics -- were correlated with wealth measures. Inspection of the data showed that, with one exception, it was only wealthy participants who mentioned wanting money for status. Similarly, it was only wealthier participants who did not mention getting basics as a reason for wanting money. As to other beliefs, there were no significant differences in how they were arrayed among wealthy and non-wealthy participants. Among the beliefs themselves, there was a significant negative correlation between wanting money for security and wanting it for freedom. Eleven participants mentioned wanting money for freedom; of those, only three also included wanting money for security.

#### Interview - Money Behaviours

Of the several behaviours (experiences) with money that were queried in the interview, some discriminated among participants in that only some participants engaged in those behaviours. These behaviours included gambling, being curious about others' money, having financial goals, budgeting, keeping track of finances, expecting that one might obtain enough money, and lending. Other behaviours were common to substantially all participants. These included being robbed, doing something for money of which one was ashamed, experiencing conflict with others, borrowing, sharing, giving and saving. Mann-Whitney U-tests showed there were no significant gender differences in the first group of behaviours.

Using a Mann-Whitney U test corrected for ties, the dichotomous measures of the forementioned distinguishing behaviours were tested against beliefs as expressed in the interview, with finances, and with SWL (Table 3). The significant findings were that

- a) Lower satisfaction with life was reported by participants who had financial goals (2-tailed  $p < .02$ ) and those who were curious about how much money other people have (2-tailed  $p < .05$ ).

Table 2: Correlations (n = 26) of ranked beliefs with financial measures and SWL

	Net assets	Net income	SWL	Basics	Frills	Family	Status	Power	Security	Freedom
Net income	.56*									
SWL	.12	.15								
Basics	.60*	.62*	.21							
Frills	.23	-.08	-.16	-.04						
Family	-.21	-.00	-.06	-.17	.06					
Status	-.76*	-.49*	.01	-.64*	-.39	.06				
Power	.13	-.20	-.13	.34	-.08	-.16	-.28			
Security	-.09	-.18	-.27	-.41	-.23	-.38	.31	-.18		
Freedom	-.23	-.20	.26	.01	-.280	.03	.04	.10	-.51*	
Itself	.27	.12	.07	-.05	-.33	-.40	.12	-.40	.40	-.20

**Table 3: Behaviour differences and ranked beliefs, financial measures and SWL (Mann-Whitney U-test)**

	Behaviour ( $Z_{\text{value}}$ score)						
	Curious	Goals	Have Enough	Gamble	Lend	Track	Budget
<b>Net assets</b>	0.50	1.13	0.71	0.05	1.94*	1.72*	0.95
<b>Net income</b>	1.49	0.45	1.28	0.36	0.21	1.22	1.51
<b>SWL</b>	1.96	2.44*	1.11	1.06	0.42	1.13	1.47
<b>Basics</b>	0.30	0.40	0.78	0.64	0.10	0.06	0.28
<b>Frills</b>	0.81	1.04	0.22	1.00	0.42	0.26	0.16
<b>Family</b>	0.63	0.09	0.54	1.07	0.36	0.11	0.60
<b>Status</b>	0.03	0.61	0.00	0.27	0.62	0.06	0.95
<b>Power</b>	0.22	1.11	1.96*	0.11	0.34	0.69	0.69
<b>Security</b>	0.66	0.32	1.16	1.85*	0.63	0.76	1.09
<b>Freedom</b>	0.67	0.60	1.08	0.47	0.79	0.00	0.60
<b>Itself</b>	0.42	1.70	1.62	0.85	1.72*	0.12	0.00

\*  $p$  (corrected for ties) < .10

b) Wealthier participants (by net assets) were more likely to keep track of their financial affairs (2-tailed  $p < .09$ ) and were less likely to lend money to others (2-tailed  $p < .06$ ).

c) As to money beliefs, three beliefs differentiated participants. Those who did not think that one could ever have enough money were more likely to suggest that money was for power (two-tailed  $p < .05$ ).

Participants who did not gamble were more likely to think that money was for security (2-tailed  $p < .07$ ). Participants who did not lend money were more likely to think money had value of itself (2-tailed  $p < .09$ ).

### Discussion

It was possible, through qualitative analysis procedures, to define constructs for ten beliefs about money; that money is for basics, frills, security, status, power, independence, relationship, time, itself, and transformation. Among the participants in the study, the correlation between income and satisfaction with life was not significant at .14. Those who set financial goals for themselves or were curious about others' money had lower satisfaction with life scores. As to the influence of beliefs, those who believed money was for power were less likely to think they could obtain enough of it, those who thought money was for security were less inclined to gamble, and those who wanted it for itself were less inclined to lend money. Finally, wealthier clients were less likely to suggest that money was to provide the basics in life, and they ranked the status value of money more highly.

The constructs which emerged during the interviews confirm and elaborate on those found in the literature. The constructs of status, power, security and money itself are common to many sources. Of the remaining four constructs, the use of money for basics or frills is fundamental to the economic literature (eg., Lea, Tarpy & Webley, 1987). The use of money for time and love/sex has been identified in the psychoanalytic literature (eg., Fenichel, 1938; Hallowell & Grace,

1991). Thus, none of the constructs has been newly identified. What is new is that all these constructs were identified in one study.

Not all of the constructs which emerged in this research replicated those found in the MBBS, MES and MAS. This may be a consequence of how those questionnaires were developed. The original items used for those questionnaires encompassed few or no items dealing with time, love, or purchase of basics or luxuries. In the factor analyses of the questionnaires, those few items which were included would have to have loaded on other constructs. Also, the nature of the scales might have precluded certain constructs. The MBBS, in particular, used items describing behaviours rather than beliefs. In that case, it might have been difficult to describe behaviours unique to the belief that money buys time or love.

This left open the question of whether all the constructs identified in this research would exist in a measurable way among a larger subject population. There was encouragement in that all of the constructs had been found in the literature, and all of them existed in the minds of at least some of the interview participants. The next task was to determine whether each of the constructs would emerge in a larger scale examination of money beliefs.

Some limitations of the research reported in this chapter should be mentioned. A qualitative research method was used in this study because the methods' tolerance for ambiguity were expected to enable discovery of new meanings of the phenomenon under investigation (Moustakas, 1990). This strength was also a major drawback, in that it was difficult to validate the outcome. There was no clear hypothesis against which to judge reported results. Information gained by qualitative methods is judged by its usefulness, not the methods by which it is obtained (Atkinson, Heath & Chenail, 1991; Hoshmand, 1989; Moustakas, 1990). In this particular study, the results were initially judged by their face validity and the richness of the money belief construct descriptions. The test of the information gathered would come with the creation of a questionnaire, as reported in the next chapter.

It should be noted that three procedures are usually adopted by qualitative researchers to offset the validity problem: documentation, triangulation, and internal validation. Documentation of all the material gathered and major decisions made in the research process enables others to work with the material to satisfy themselves of the adequacy of interpretations or to derive alternate descriptions (Henwood & Pidgeon, 1992; Hoshmand, 1989). The materials used in this study have been retained by the author, and are available (within the limits of confidentiality) for inspection. Triangulation enhances validity by using different measures, different methods, different data sources, and different researchers to study the same phenomenon (Mathison, 1988). In this study, two different means (interview and questionnaire) were used to gather data, but an optimal approach would have been to use several interviewers and data interpreters. Internal validation would require double checking of data by independent persons (Warren, 1992), by the subjects themselves (Mousakas, 1990) or by using negative case analysis to find cases that do not fit the emerging constructs (Hoshmand, 1989). Only one of these procedures was used in this study, which weakened the degree of reliance that could be placed on it. Notwithstanding the above limitations, the findings were used as the basis for developing a Money Beliefs Questionnaire.

### CHAPTER 3

#### MONEY BELIEFS QUESTIONNAIRE CONSTRUCTION

The aim of the research reported in this chapter was to develop a money beliefs questionnaire based on explicitly formulated belief constructs (chapter 2), and developed using the construct approach to scale construction (Jackson, 1971). In the questionnaire construction, due regard was paid to the influence of response bias, social desirability responding, and the multidimensional nature of attitude strength. A subsidiary aim was to compare the newly created questionnaire to the MBBS, MES and MAS and to perform confirmatory factor analyses of those questionnaires to assess their replicability.

The limitations of three extant money questionnaires (discussed in chapter 1), led to this attempt to construct a money questionnaire, which was to deal only with beliefs about money, rather than being an amalgam of money attitudes, emotions, beliefs and behaviours. This focus on beliefs was in keeping with that established in the qualitative study, and kept the questionnaire development within reasonable proportions. More importantly, social psychological theory and the results of the qualitative study indicated that similar beliefs did not necessarily underlie similar behaviours across individuals<sup>1</sup>. Also, money constructs lent themselves most easily to description in the nature of beliefs, rather than emotions (in the qualitative study, participants' found it very difficult to free associate to money and a stated emotion, such as sadness or fear). Thus it seemed that restricting the questionnaire to beliefs would be most fruitful, as it would lead to a more valid questionnaire.

For the purpose of this research, a belief was as defined within the three-component model of attitudes (first proposed by Rosenberg and Hovland, 1960).

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<sup>1</sup> Thus, for example, one person might be a generous tipper who believes that spending money denotes power, while another might be motivated by an imperative to use money charitably.

In this model, an attitude toward an object is comprised of affective, cognitive, and conative elements. The first is an evaluative component, and implies feeling positively or negatively about the attitude object; the second is a belief component, or state of knowledge about the object; and the third is a behavioural component, or disposition to behave in a certain way toward or about the object. A belief was defined as the "opinion held about the attitude object or ... the information, knowledge or thoughts someone has about the attitude object." (Stahlberg & Frey, 1988, p 143) It was assumed that this definition of beliefs would also enable the questionnaire to be used in testing of other belief models, such as that of Ajzen and Fishbein (1975), in which attitudes are described in terms of beliefs, expectancies and values, or the Lazarus (1991a) model, discussed in chapter 1.

The questionnaire items were developed in such a way as to measure belief strength and so permit a better gauge of how these beliefs might affect quality of life. Krosnick et al. (1993) report that there are dimensions of attitude strength that are related but distinct, and recommended that specific studies use the conceptual approach that is closest to the operationalization of the attitude under study. In this study, the dimensions of strength most relevant to money beliefs were those of importance, knowledge, and certainty. Therefore, items on the money belief questionnaire were developed to reflect the dimensions of the importance of the belief to the individual, the level of knowledge about the belief, and the certainty with which the belief is held.

The qualitative study of participants' experiences with money, described in Chapter 2, led to the formulation of explicit constructs of money beliefs. Thus, money belief items were developed using those constructs, incorporating belief strength dimensions of importance, knowledge and certainty, and including a balance of positively and negatively keyed items. These items were then used as the basis for developing the money beliefs questionnaire.

There were three stages to questionnaire development. In the first, scale items were developed and administered to a sample of the general population and



the results were analyzed to provide scales of identifiable constructs. In the second, the questionnaire was administered to a student population to validate the scale constructs, to identify weak items, and to devise the final money beliefs questionnaire (MBQ). In the third, the revised questionnaire was administered to another general population sample (together with other money questionnaires) for validation.

An ancillary purpose of the current research was to examine further the three other money scales: the Money Beliefs and Behaviours Scale (MBBS - Furnham, 1994); the Money Ethic Scale (MES - Tang, 1990) and the Money Attitude Scale (MAS - Yamauchi & Templer, 1980). A review of the literature indicated that no formal confirmatory work had been done to test those scales' psychometric properties. These properties must be tested and proven if the scales are to become part of psychology's accouterments for the study of the effect of money on psychological functioning. Administration of the MBBS, MES and MAS to the group of Canadian participants selected in the third stage of the research on the MBQ, and analysis of the results of that administration could confirm the factor structures found in the original research and the reliability of those scales. A conservative significance level of .01 was selected for statistical tests because of the exploratory nature of the study.

## STAGE 1 - INITIAL QUESTIONNAIRE DEVELOPMENT

### Method<sup>2</sup>

#### Procedure

Participants were recruited in Ottawa and London, Ontario using a protocol in which squares on the city map were selected at random by drawing sets of coordinates (two for Ottawa and one for London). Within each square,

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<sup>2</sup> The data obtained from the subjects, as described in this chapter, are also used in analyses reported in Chapter 4. For simplicity, complete descriptions of the materials used are reported only in this chapter.

streets were selected for sampling. Sampling consisted of first delivering an introductory letter to each house on the selected streets. Within a week, the researcher called at each house and left a questionnaire for each adult of eighteen years or more who was willing to participate. Questionnaires were to be picked up at an arranged time, usually two days later. In this way, 273 questionnaires were distributed and 210 useable responses obtained; 163 from Ottawa and 47 from London.

### **Participants**

Questionnaires were completed by 210 participants; 87 males and 121 females. The demographic and wealth characteristics of the sample are presented in Tables 19 and 20 of Appendix 2. The average age of the respondents was 43 years, the modal income category was \$20,000 to \$30,000 per year, and 77% of the participants reported having some college or university education, with 59% having obtained a degree. Males were significantly richer than females, with a modal income category of \$30,000 - \$40,000/year compared to \$10,000 - \$20,000/year ( $t = 3.47$ ; two-tailed  $p < .01$ ), which is consistent with population characteristics. Comparison of the sample with census data suggests differences in the distribution, which are likely due to the voluntary nature of the sample. As to differences in two samples by location, the Ottawa sample was significantly older, with an average age of 45 years compared to 35 years for the London sample ( $t = 2.98$ ; two-tailed  $p < .01$ ), and had more assets (modal asset category \$100,000-\$200,000 versus \$75,000-\$100,000; two-tailed  $p < .01$ ).

### **Measures**

**Demographic** (see Appendix 2 for materials presented to participants). A brief demographic questionnaire also contained items about the participants' family income, income, assets and debts.

**Money Beliefs Questionnaire (MBQ)**. All of the constructs developed in the qualitative study were used as the basis for writing the item pool (see chapter 2 for description of constructs). These constructs were not completely independent of one another in their meaning. For example, a sense of autonomy

had elements of independence and of security; and the ability to use one's time as one sees fit could have been considered a subset of freedom. It was anticipated that the final scale would see the collapse of some constructs into others, but the preference was for overstating, rather than understating, the number of constructs at the early stage of questionnaire development. Although a construct of social comparison had not emerged from the qualitative study, it was added to the MBQ because of the predominance of that theory in explanations of the income/quality of life relationship.

Twenty items were written for each construct. Items were written as much as possible to reflect only personally held beliefs, rather than those which are ascribed to others, because participants in the qualitative phase of the research made clear distinctions between what they themselves wanted money for, and what they thought others wanted money for (see also discussion in Prince, 1991). To get a measure of attitude strength, items were written to assess the importance of the belief to the individual, the certainty with which it was held, and the level of knowledge about the belief. While the intent was to exclude emotional content from items, the constructs of 'frills' and 'security' incorporated emotion by definition (enjoyment and freedom from worry), so there were some items with emotional content although this was reduced as much as possible. Each scale had a balance of positively and negatively keyed items. Items for each construct were mixed up in the questionnaire given to the participants, and were scored using a 7-point Likert scale with anchors indicating agreement or disagreement with the item.

Balanced Inventory of Desirable Responding (BIDR - Paulhus, 1988). This is a 40-item inventory with balanced keying which measures two constructs of impression management (deliberate self-presentation to an audience) and self-deceptive positivity (to self-report in a way which is positively biased, even though it may be true). Coefficient alphas reported for the scales range, respectively, from .68 to .80 and from .75 to .86. Test-retest reliability over a 5-week period was .65 and .69 (Paulhus, 1988).

**Positive and Negative Affect Schedule (PANAS - Watson, Clark & Tellegen, 1988).** This is a 20-item inventory of positive and negative affect generally experienced. Coefficient alpha reliabilities have been reported of .88 and .87, with test-retest reliability of .68 and .71 over an 8-week period.

**Perceived Quality of Life Scale (PQOL - Pellizari, Evans & Callard, 1995).** This is a 12-item scale measuring cognitive judgments of satisfaction with various domains of one's life. Coefficient alpha reliabilities have been reported of .74 for student samples and .81 for community samples.

**Satisfaction with Life Scale (SWL - Pavot et al., 1981).** This is a five-item scale measuring overall satisfaction with life. Coefficient alpha reliabilities have been reported of .87 and .83 (Diener, Emmons, Larsen & Griffin, 1985; Pavot et al., 1991).

### **Analysis**

In selecting items for the MBQ, the following procedure was adopted:

- 1) items were deleted if their measures of kurtosis and skew exceeded an absolute value of 1.5, indicating too peaked or flat a distribution of responses;
- 2) items were deleted if their correlation with the social desirability or impression management scales of the BIDR exceeded .30;
- 3) items were factor analyzed with the goal of obtaining orthogonal scales;
- 4) items were deleted if they had a higher correlation with another scale than with their own;
- 5) items were deleted if they had an item efficiency index of less than 0.4;
- 6) items were added back to 3 scales to bring the total number of items per scale to 12;
- 7) scales were reviewed and rekeyed, if necessary, to ensure a balance of positive and negative keying; and

- 8) scale construct descriptions were reviewed and revised, if necessary, to reflect items content.

## Results

### Development of Money Beliefs Questionnaire

Initial elimination of items. The item frequency statistics were calculated using SPSS/PC FREQUENCIES. There were 35 items deleted because of high kurtosis and skewness. Scores were calculated for the BIDR, and three belief items were eliminated because of a high correlation with the impression management score. A review was then conducted to ensure that there was a reasonable balance in the number of items for each construct (the remaining number of items per scale is shown in table 4). Items were removed from all eleven of the original constructs. Two scales were reduced by one item, two scales by two items, three scales by three items, two scales by four items, one scale by five items and one scale by seven items. The proportion of items for each scale remained reasonable, and no further items were eliminated.

Scoring of items using original constructs. The Neill-Paunonen rating scale scoring program (Jackson, Strasburger & Paunonen, 1992) was used to score items according to the original 11 constructs for which they had been developed. This program indicates the redundancy of variance among items on each of the scales by giving an item efficiency index that represents "the relative contribution of the scale intercorrelations and the item-scale correlation" (Neill & Jackson, 1976, p.127). Table 4 shows the results of this scoring. The average item efficiency index was .144, with indices ranging from .003 to .438. The average alpha reliability was .57, with values ranging from .29 to .75. It seemed clear that the items were not loading on the predicted scales. The use of the original constructs was then abandoned in favour of using a factor analytic solution to fit the data.

Factor and item analysis to derive independent scales. A principal components factor analysis was performed, with pairwise deletion of missing values. Initial statistics are presented in Table 22 of Appendix 2. Inspection of

**Table 4: Stage 1 - Scale-related Statistics for MBQ Original Constructs**

<b>Construct</b>	<b># items</b>	<b>mean p value</b>	<b>mean variance</b>	<b>mean item- total R</b>	<b>IEI coeff</b>	<b>coeff alpha</b>
<b>Security</b>	18	4.38	3.15	.127	.078	.754
<b>Status</b>	17	3.84	2.95	.072	.022	.693
<b>Freedom</b>	17	4.76	2.80	.042	.003	.707
<b>Power</b>	18	3.35	3.28	.403	.438	.673
<b>Family</b>	14	3.60	3.12	.091	.054	.289
<b>Money itself</b>	17	3.38	3.23	.079	.017	.633
<b>Time</b>	18	4.42	3.63	.085	.073	.552
<b>Luxury</b>	19	4.36	3.41	-.042	.015	.741
<b>Basics</b>	15	4.28	3.06	.341	.322	.495
<b>Transformation</b>	17	4.06	3.00	.272	.282	.363
<b>Social comparison</b>	16	3.54	3.10	.300	.283	.388

the scree plot suggested that 11 factors would be meaningful. A series of factor solutions of the data was then performed to assess which one could be expected to lead to the most meaningful factors and the most reliable scales. Factor solutions were obtained for 11, 10, 12, 5, 6 and 7 factors, and items with a factor loading greater than .4 were subjected to the Neill-Paunonen scoring program. Final scale statistics. The seven factor solution, using 12 items per scale, was selected as being optimal in terms of variance accounted for, item efficiency and interpretability of factors. Table 23 in Appendix 2 shows item content for the 7-factor solution, with the original construct for which the item was written. The seven factors were **Security, Power, Not Enough, Money Itself, Circumspection, Luxury and Transformation**<sup>3</sup>. Of these, all but **Not Enough** and **Circumspection** were represented on the original constructs. For some of the scales, items were selected which had a factor loading of less than .4 in order to bring the scale size to 12 for purposes of cross-validation.

Scale statistics of the 12-item scales are presented in Table 24 in Appendix 2. Items had been deleted if they had a higher correlation with another scale than with their own scale, and final items were selected to maximize the item efficiency index (a measure of the item's correlation with other scales -- Neill and Jackson, 1976). With three or four exceptions in each of the **Circumspection, Luxury and Transformation** scales, the efficiency index exceeded .40 for all items. Final scales showed coefficient alphas ranging from .572 to .805.

A review of the final content of the seven scales was then made, and a comparison to the MBBS, MES and MAS. Table 5 shows which scales were expected, by a subjective review of their content, to be highly correlated in a subsequent sample. Strong assertions about the similarity of the scales were difficult to make, however, because of semantic differences, and because the link between behaviours and beliefs was still unproven. For example, the **MBQ Security** scale was linked to one of each of the other scales. However, the **MBQ**

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<sup>3</sup> Descriptions of the final scales are given on page 57.

**Table 5: Subjective comparison of scale content on the four questionnaires**

<b>MBQ (1st stage)</b>	<b>MAS (Yamauchi &amp; Templer, 1982)</b>	<b>MBBS (Furnham, 1984)</b>	<b>MES (Tang, 1992)</b>
Security	Retention-time	Security	Freedom-power
Power	Power	Power	Respect
Not Enough	Anxiety	Inadequacy	-
Money itself	-	Obsession	Good
Circumspection	-	-	Evil
Luxury	-	Power	Achievement
Transformation	-	-	-
-	Distrust	Retention	Budget
-	-	Effort-ability	-



Security scale described a sense of fear that one would not have enough money for the future. The **MAS Retention-time** scale described actually putting money aside (presumably to allay such fears). The **MBBS Security** scale described an awareness of how much money one actually has, and being proud of saving money. The **MES Freedom** scale described beliefs that money gives one freedom and security and power.

## STAGE 2 - QUESTIONNAIRE REFINEMENT

### Method

#### Procedure

Participants were recruited from the participant pool of the introductory psychology course at the University of Western Ontario. (Appendix 2 contains recruitment materials and the questionnaire.) This experiment was one of five that each student in that course is required to participate in for credit. While students received their credit immediately and were entitled to withdraw without completing any questionnaires, 336 of the 337 students who signed up for the experiment completed a set of questionnaires.

#### Participants

The demographic characteristics of the sample are included in Table 20 of Appendix 2. One hundred thirty-five males and 201 females completed the questionnaire, and males were not significantly different from females with respect to age or income ( $p < .05$ ).

#### Measures

The following measures, described earlier in this chapter, were employed in this study: a demographic questionnaire, the Balanced Inventory of Desirable Responding, the Positive and Negative Affect Schedule, The Perceived Quality of Life Scale, and the Satisfaction with Life Scale.

Money Beliefs Questionnaire (MBQ). The eighty-four item money beliefs questionnaire developed in the first stage was administered to the participants.

Some of the twelve items for each of the seven constructs were reworded slightly to ensure a balance of positively and negatively keyed items in the questionnaire. Again, items for each construct were mixed up in the questionnaire given to the participants, and were scored using a 7-point Likert scale.

### **Analysis**

In refining the Money Beliefs Questionnaire, the following procedures were adopted:

- 1) item frequencies were reviewed and items deleted if their kurtosis and skewness exceeded an absolute value of 1.5;
- 2) items were deleted if they had a correlation with social desirability scores of the BIDR greater than .30;
- 3) items were deleted if they had a higher correlation with another scale than with their own;
- 4) items were deleted if they had an item efficiency index of less than 0.40, provided each scale contained at least eight items;
- 5) scales with a coefficient alpha greater than .70 were retained.

## **Results**

### **Development of Money Beliefs Questionnaire**

**Initial elimination of items.** The item frequency statistics were calculated using SPSS/X FREQUENCIES. Three items were deleted from the Transformation scale on the basis of kurtosis and skewness. Scores were calculated for the BIDR, but no belief items had a correlation with either the self-deceptive responding score or the impression management score that was above the established criterion level. Similarly, no items had higher correlations with scales other than their own. Twenty-two items were deleted because their item efficiency index was less than 0.4 as identified using the Neill-Paunonen rating scale scoring program (Jackson, Strasburger & Paunonen, 1992), however, a minimum of 8 items was retained for the Circumspection and Transformation scales. Finally, the Circumspection and Transformation scales had coefficient

alphas of .565 and .604. Items on these scales were not deleted from the printed questionnaires, but the scales were not used in further analyses as they were not considered sufficiently reliable.

Table 6.1 shows the final scale statistics for the five remaining scales of **Security, Power, Not Enough, Money Itself** and **Luxury**. Coefficient alphas for these scales ranged from .702 to .831. (For information, the **Circumspection** and **Transformation** scales are included in this table.) Comparable information on the data obtained in Stage 1 of the scale construction, scored using only the items ultimately retained is shown in Table 6.2. Coefficient alphas for these scales dropped in value, ranging from .734 to .783. Correlations among scales were still high. Table 7 shows the correlations among the final scales.

### STAGE 3 - QUESTIONNAIRE VALIDATION

#### Method

##### Procedure

Participants were recruited in London, Ontario using much the same protocol as for the first stage sample. Two squares on the city map were selected at random by drawing sets of coordinates. Within each square, streets were selected for sampling. In addition, to ensure a more economically representative sample, tenants in four apartment buildings were also sampled. Sampling consisted of first delivering an introductory letter to each household selected. Within a week, the researcher called at each home and left a questionnaire for each adult of eighteen years or more who was willing to participate. Questionnaires were to be picked up at an arranged time, usually two days later. In this way, 363 questionnaires were distributed and 267 useable responses obtained.

##### Participants

Detail of the demographic and wealth characteristics of the sample are presented in Tables 20 and 21 of Appendix 2. The average age of the respondents was 42 years, the modal income category was \$20,000 to \$30,000 per

Table 6.1: Scale-related statistics for final MBQ - Stage 2 data

	# items	mean p value	mean variance	mean item- total R	IEI coeff	coeff alpha
Security	10	5.82	2.58	.527	.464	.702
Power	11	3.60	3.01	.611	.564	.831
Not Enough	8	4.95	2.66	.583	.511	.727
Money itself	9	3.78	3.48	.608	.569	.791
Luxury	8	2.83	2.96	.541	.526	.763
Circumspection	8	3.23	3.33	.501	.468	.565
Transformation	8	5.32	2.46	.473	.435	.604

Table 6.2: Scale-related Statistics for final MBQ - Stage 1 data

Construct	# items	mean p value	mean variance	mean item- total R	IEI coeff	coeff alpha
Security	10	5.30	2.59	.593	.570	.784
Power	11	3.28	3.37	.577	.560	.783
Not Enough	8	4.76	3.40	.590	.567	.753
Money itself	9	2.91	3.30	.578	.564	.735
Luxury	8	3.97	4.22	.585	.567	.734
Circumspection	8	2.90	3.07	.526	.511	.619
Transformation	8	4.90	2.79	.505	.495	.608

**Table 7: Intercorrelations (n = 335) among MBQ scales - Stage 2 data**

	<b>MBQ: Security</b>	<b>MBQ: Power</b>	<b>MBQ: Not Enough</b>	<b>MBQ: Itself</b>
<b>MBQ:Power</b>	.40			
<b>MBQ:Not Enough</b>	.68	.42		
<b>MBQ:Money itself</b>	.35	.37	.43	
<b>MBQ:Luxury</b>	.43	.50	.56	.47

all correlations are significant at  $p < .01$

year, and 76% of the participants reported having some college or university education, with 54% having obtained a degree. Questionnaires were completed by 105 males and 162 females. The males were not significantly different from the females in terms of age, assets, net assets, net income or family income. Comparison of the sample with census data suggests differences in the distribution, which are likely due to the voluntary nature of the sample.

### **Measures**

Appendix 2 contains materials presented to participants. The following measures, described earlier in this chapter, were employed in this study: a demographic questionnaire, the Balanced Inventory of Desirable Responding, the Positive and Negative Affect Schedule, The Perceived Quality of Life Scale, and the Satisfaction with Life Scale.

**Money Beliefs Questionnaire (MBQ).** All eighty-four of the items retained from the initial scale development were administered to participants.

**Money Beliefs and Behaviours Scale (MBBS - Furnham, 1984).** This is a sixty-item inventory which measures six constructs of money beliefs and behaviours.

**Money Ethic Scale (MES - Tang, 1992).** This is a thirty-item inventory which measures six constructs of money beliefs and behaviours. Coefficient alphas reported for the scale range from .56 to .83.

**Money Attitude Scale (MAS - Yamauchi & Templer, 1982).** This is a 29-item inventory that measures four scales of money behaviours and beliefs. The coefficient alpha reported for the questionnaire overall is .77, with scores for each of the scales ranging from .69 to .80, and test-retest reliability over a five week period ranging from .87 to .95.

**Preferences in Life Questionnaire.** This 42-item questionnaire was constructed for the purpose of validating the constructs underlying the MBQ. It utilized a forced-choice format in which respondents were asked to select from two extremes on seven items for each of the constructs included in the MBQ - security, power, money itself, not enough, and luxury.

## Results

### Money Beliefs Questionnaire

**Scale descriptions.** A revised (or, in the case of the Not Enough scale, a new) description of the constructs, developed using the items on the scales, is as follows:

#### **SECURITY**

With money, one need not fear the consequences of not having enough money. Averse consequences can include feeling worried, going hungry or being homeless. With money, one obtains a feeling of being protected from danger, of being in control of one's own circumstances, of assurance that one's own and one's family's basic needs will be met. With money, one has a feeling of security; the peace of mind that comes from the assurance that one has enough money.

#### **POWER**

With money, one gains control, power, or the ability to manipulate the actions of others. One has the authority, prestige or influence to sway decisions of groups or of individuals - either within the family, one's place of work, or in the political arena. With money, one also has a degree of distinction or status.

#### **NOT ENOUGH<sup>4</sup>**

Without enough money, one has less ability to enjoy one's life, less choice in how one spends one's time, fewer options of what one does or what one owns. Lack of money leads to discontent, a feeling of being trapped, perhaps even of hopelessness. There is sense that, if only one had more money, one's life would be less dreary.

#### **ITSELF**

There is a fascination about money itself and about people who have money. There is a lure to getting money for its own sake, a thrill associated with obtaining, possessing, counting, and/or spending money.

#### **LUXURY**

With money, one can indulge one's self and enjoy a style of life that includes more than what is absolutely necessary. One can have what one wants - those things which are for convenience, pleasure, luxury, leisure, fun

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<sup>4</sup> Names for this scale which were considered and rejected included, "Need Money", "Insufficiency" and "Avarice".

or comfort. One can also do what one wants - by paying others to take care of distasteful chores.

**Scale statistics.** Table 8 shows the scale statistics of the scales, as derived using the Neill-Paunonen rating scale scoring program (Jackson, Strasburger & Paunonen, 1992). The item efficiency index exceeded .40 for all items. Final scales showed coefficient alphas ranging from .64 to .76. Table 9 shows that the correlations among the final scales, ranging from .16 to .56, remained quite high. Table 25 in Appendix 2 shows the final MBQ items for each scale together with the loading of each item to that scale for the Stage 3 data; item loadings ranged from .26 to .69.

**Confirmation of structural equations.** The MBQ was not completely derived from factor analysis, because items were deleted following an inspection of items in Stage 2. However, structural equation modelling procedures were used to assess the degree of fit of the scale structure in the new sample. The EQS program (Bentler, 1992a) was used to assess the structural validity of the final 46 items to the five scales. The covariance matrix used by the model was derived using listwise deletion for missing values, which resulted in a minimum  $n$  for the model of 166 participants. The means and standard deviations for each item, together with the correlation matrix, is contained in Appendix 3.

A model was used in which each item was uniquely predicted by its scale, or latent factor, and each factor was free to covary with each other factor. No restrictions were placed on error variances as this was considered too restrictive (Bentler, 1992b; Byrne, 1994). Each parameter estimate was significant ( $t > 2.4$ ,  $p < .01$ ). The chi-square associated with the model was significant at 1,663 with 979 degrees of freedom (see Table 10). The comparative fit index of the model was only fair, at .627.

### **Comparison of MBQ and other Money Questionnaires**

**Confirmation of structural equations.** Confirmatory factor analyses of the originally reported factor structures of the MBBS, MES and MAS were similarly conducted using the EQS program. Listwise deletion was used to create the



**Table 8: Scale-related Statistics for final MBQ - Stage 3 data**

	# items	mean p value	mean variance	mean item- total R	IEI coeff	coeff alpha
<b>Security</b>	10	5.28	2.93	.517	.490	.683
<b>Power</b>	11	3.34	3.66	.544	.515	.758
<b>Not Enough</b>	8	4.91	3.30	.556	.511	.698
<b>Money itself</b>	9	3.11	3.54	.590	.567	.762
<b>Luxury</b>	8	3.99	4.33	.526	.495	.637

**Table 9: Intercorrelations (n = 260 to 265) among MBQ Scales - Stage 3 data**

	MBQ: Security	MBQ: Power	MBQ: Not Enough	MBQ: Itself
<b>MBQ:Power</b>	.24*			
<b>MBQ:Not Enough</b>	.56*	.32*		
<b>MBQ:Money itself</b>	.16	.33*	.31*	
<b>MBQ:Luxury</b>	.23*	.36*	.48*	.34*

\* significant at  $p < .01$

<b>Table 10: Fit of structural equation models of MBQ, MBBS, MES and MAS</b>					
	<b>n</b>	<b># items</b>	<b>chi-square (df)(<math>p &lt; .001</math>)</b>	<b>Nonnormed fit index</b>	<b>Comparative Fit Index</b>
<b>MBQ</b>	166	46	1663 (979)	.605	.627
<b>MBBS</b>	188	47	1908 (1015)	.472	.504
<b>MES</b>	231	30	959 (390)	.707	.737
<b>MAS</b>	226	29	894 (371)	.759	.780

covariance matrix, and the correlation matrices, means, and standard deviations for all the items used in these models are contained in Appendix 3. Again, in building the equations, no restrictions were placed on error variances, but each item was uniquely predicted by its scale and each factor was free to covary with the other factors. Table 10 shows the number of participants and items, chi-square and comparative goodness of fit index for each of the MBQ, MBBS, MAS and MES.

**Reliability.** Coefficient alpha reliabilities of each of the scales of the MBBS, MES and MAS were computed using SPSS/X RELIABILITIES. These reliabilities (reported in Table 11) varied from .30 to .76 for the MBBS, from .61 to .79 for the MES, and .71 to .89 for the MAS.

**Social desirability responding.** Table 12 presents correlations of the scale scores on each questionnaire with the impression management and social desirability scales of the BIDR. As expected, all had a number of significant correlations between their scales and the impression management scale, except the MES, which had only one significant correlation to the impression management scale. Both the MBBS and MAS had a number of scales correlate significantly with the impression management scale, and half correlate significantly with the social desirability scale of the BIDR.

#### **Validation of MBQ Constructs**

A Preferences in Life questionnaire was designed to validate the constructs in the MBQ; however, the effort failed. Reliabilities for the original items in the Preferences in Life questionnaire ranged from .23 to .78. Given the poor reliabilities on some of the scales, items were successively deleted to improve their alpha coefficients. The obtained reliabilities, reported in Table 13, ranged from .31 to .81. Table 13 presents the correlations of MBQ scales with the Preferences scales. With the exception of the Power scale, all scales of the Preferences questionnaire had their highest loading with the comparable scale of the MBQ. However, a number of significant correlations were found among the scales.

**Table 11: Reliabilities of MBBS, MES and MAS questionnaires**

	<b># items</b>	<b>coefficient alpha</b>
<b>MBBS: Obsession</b>	18	.76
<b>MBBS: Power</b>	8	.50
<b>MBBS: Retention</b>	6	.47
<b>MBBS: Security</b>	8	.56
<b>MBBS: Effort</b>	4	.47
<b>MBBS: Inadequacy</b>	7	.30
<b>MES: Good</b>	9	.79
<b>MES: Evil</b>	6	.61
<b>MES: Achievement</b>	4	.68
<b>MES: Respect</b>	4	.66
<b>MES: Budget</b>	3	.75
<b>MES: Freedom</b>	4	.62
<b>MAS: Power</b>	9	.89
<b>MAS: Retention</b>	7	.83
<b>MAS: Distrust</b>	7	.72
<b>MAS: Anxiety</b>	6	.71

Table 12: Correlations of MBQ, MBBS, MES and MAS with BIDR

	Social desirability	Impression management
MBQ: Security	.04	.06
MBQ: Power	-.15	-.23*
MBQ: Not Enough	-.02	-.22*
MBQ: Itself	.00	-.22*
MBQ: Luxury	-.01	-.42*
MBBS: Obsession	-.26*	-.45*
MBBS: Power	-.23*	-.38*
MBBS: Retention	-.27*	-.17*
MBBS: Security	.13	.21*
MBBS: Effort	.13	.02
MBBS: Inadequacy	-.13	-.25*
MES: Good	.05	-.06
MES: Evil	-.03	-.05
MES: Achievement	-.05	-.11
MES: Respect	-.08	-.14
MES: Budget	.17	.32*
MES: Freedom	-.05	-.12
MAS: Power	-.18	-.33*
MAS: Retention	.10	.28*
MAS: Distrust	-.20*	-.30*
MAS: Anxiety	-.20*	-.35*

\*  $p < .01$

**Table 13: Correlations (n's = 219 to 234) of preferences and MBQ scales - Stage 3 data**

	Preferences in Life Questionnaire				
	Security	Power	Not Enough	Money itself	Luxury
<b>MBQ: Security</b>	.20**	.04	-.21**	.24**	.19**
<b>MBQ: Power</b>	-.11	.15*	-.00	.34**	.20**
<b>MBQ: Not Enough</b>	-.00	.17*	-.26**	.37**	.40**
<b>MBQ: Money itself</b>	-.05	.16*	-.06	.56**	.27**
<b>MBQ: Luxury</b>	-.11	.13	-.11	.43**	.46**
<b>Number of items</b>	4	5	4	5	5
<b>Coefficient alpha</b>	.64	.48	.31	.72	.81

\*  $p < .01$ ; \*\*  $p < .001$

Correlations with other money scale scores. Table 14 shows the correlation of the MBQ scales with the three other money belief scales administered to the participants. Recall that Table 5 contains predictions of how these scales were predicted to correlate, based on the content of their items. Actual correlations were not entirely as predicted.

There was no discernable pattern of correlations among the questionnaire scales. For the MBBS, its **MBBS Obsession** scale correlated highly with all of the MBQ scales. The correlations of the MBBS and MBQ were not as predicted by inspection of item content, except that the **MBBS Inadequacy** scale correlated highly with the **MBQ Not Enough** scale. For the MES scale, both the initial factor, **MES Good**, and the last factor, **MES Freedom**, correlated highly with all MBQ scales. Other correlations were as predicted; the MES scales of **Good**, **Achievement**, **Respect** and **Freedom** correlated highly (though not always most highly) with the MBQ scales of **Itself**, **Luxury**, **Power** and **Security**. On the MAS scale, the **MAS Anxiety** scale correlated highly with the **MBQ Not Enough** scale, as predicted. Otherwise, correlations were not as predicted. The **MAS Power** scale correlated highly with the **MBQ Power** scale as predicted, but it also correlated highly with all the other MBQ scales except the **MBQ Security** scale.

### Summary

The purpose of this research was to gather empirical support for the constructs of money beliefs, and to develop a money beliefs questionnaire, giving due regard to considerations of the influence of response bias, social desirability responding, and the nature of attitude strength. This goal was met, in that a broad range of potential constructs was tapped in developing the MBQ, and response bias, social desirability responding and attitude strength were all considered in selecting scale items.

The number of constructs in the final MBQ was reduced from the ten constructs that emerged in the qualitative study; only five money beliefs salient to a Canadian population were reliably replicated across samples. The MBQ dealt

Table 14: Correlations (n's = 251 to 261) of MBQ with MBBS, MES and MAS

	MBQ: Security	MBQ: Power	MBQ: Not Enough	MBQ: Itself	MBQ: Luxury
<b>MBBS: Obsession</b>	.17*	.40*	.39*	<u>.57*</u>	.28*
<b>MBBS: Power</b>	.16	<u>.14</u>	.16*	.02	<u>.14</u>
<b>MBBS: Retention</b>	.15*	.08	.09	.13*	-.07
<b>MBBS: Security</b>	<u>.13</u>	-.11	-.15	-.04	-.25*
<b>MBBS: Effort</b>	-.02	.12	.33*	.11	.24*
<b>MBBS: Inadequacy</b>	-.06	-.02	<u>-.22*</u>	.05	.04
<b>MES: Good</b>	.50*	.22*	.41*	<u>.36*</u>	.27*
<b>MES: Evil</b>	-.17*	.15	.08	.04	.02
<b>MES: Achievement</b>	.22*	.43*	.27*	.47*	<u>.33*</u>
<b>MES: Respect</b>	.16*	<u>.49*</u>	.17*	.40*	.26*
<b>MES: Budget</b>	.11	-.13	-.21*	-.10	-.21*
<b>MES: Freedom</b>	<u>.37*</u>	.41*	.37*	.33*	.29*
<b>MAS: Power</b>	-.03	<u>.35*</u>	.20*	.43*	.35*
<b>MAS: Retention</b>	<u>.13</u>	-.05	-.19*	-.08	-.10
<b>MAS: Distrust</b>	.05	.20*	.19*	.25*	.15
<b>MAS: Anxiety</b>	.19*	.24*	<u>.51*</u>	.23*	.26*

\*  $p < .01$ highlighted correlations were predicted to be higher (see Table 5)



only with beliefs about money, rather than behaviours, thus lending itself to use in the development of formal models of the influence of money beliefs and behaviours, in keeping with social psychological theory which suggests that similar beliefs do not necessarily underlie similar behaviours across individuals. The result was a questionnaire with stronger validity. The MBQ, in comparison to other money questionnaires, has adequate reliability. The five scales of the MBQ, while similar to those of other money belief scales, contain enough differences to argue for the MBQ's justification as a separate measure of money beliefs.

The confirmatory factor analyses of the MBBS, MES and MAS indicated that, with a sample Canadian population, the MBBS and MBQ had poorer comparative fit indices while the MES and MAS had stronger comparative fit indices. Both the MBBS and MAS had high correlations with scales of social desirability responding and impression management responding, the MBQ had significant correlations only with impression management responding, whereas the MES was not correlated with those scales. The attempt to validate the MBQ with a Preferences in Life Questionnaire and with the other money questionnaires cannot be considered successful.

## CHAPTER 4

### MODELS OF MONEY, MONEY BELIEFS AND QUALITY OF LIFE

Attempts to predict quality of life scores by measures of income have produced contradictory results (see discussion in Chapter 3). It was postulated that money beliefs might moderate the relationship between quality of life and income. A specific belief, or beliefs, might affect the strength of the relationship between income and quality of life, and the impact of income on quality of life would be greater (or less) for an individual who held that belief(s). There was no prior empirical research upon which to predict which of these beliefs would be most salient to quality of life. Thus, the purpose of this research was to create an exploratory model (or models) of money beliefs, income and quality of life using data collected in Stage 1 of the research, then to test those models with the data collected in Stages 2 and 3.

A preliminary investigation with the Stage 1 data was conducted to assess whether money beliefs moderated the relationship of income and quality of life. For each money belief, multiple regression of quality of life on income, the money belief, and the cross-product of income and the money belief was performed. No significant effect was found for any of the money beliefs. Statistically, the optimal conditions for finding a moderator effect using multiple regression would be when one could assume that the money beliefs are uncorrelated with either income or quality of life, and that there are no differences in measurement error of the three (Baron & Kenny, 1986). Neither assumption was reasonable in this instance, so the preferred approach was to perform analyses using structural equation modelling, a procedure which adjusts for measurement errors.

Structural equation modelling was selected as the multivariate analysis technique that would best suit the development and testing of hypotheses about the relationships among the latent factors of income, money beliefs and quality of life. In the procedure, an observed covariance matrix among variables is compared to the covariance matrix derived from a hypothesized model of the

data. The statistical techniques provide measures of the fit of the hypothesized model to empirical data. Where the fit is adequate, this supports the credibility of the relationships described in the model (Bollen, 1989, Byrne, 1994).

### Method

The data used for model building and validation were that collected in Stages 1, 2, and 3 of constructing the Money Beliefs Questionnaire (MBQ). Information about data collection and participant demographics and the measures used are reported in Chapter 3.

#### Method of Analysis

A covariance matrix of the variables of interest was derived for each of the three data sets (Stages 1, 2 and 3). Information about the means, standard deviations and correlations of those variables is included in Appendix 3. Variables included MBQ items, scores on the Satisfaction with Life Scale, Perceived Quality of Life Questionnaire and Positive and Negative Affect Schedule, income and family income. For both the Stage 1 and Stage 3 data sets, variables also included a measure of total assets and total debts.

Analyses were conducted using the EQS program (Bentler, 1992a). Models were estimated by the maximum likelihood method. To ensure a latent factor would be well represented in constructing a structural model, sufficient variables were needed to measure that construct. However, the constraints of the EQS program meant that inclusion of too many variables would limit the sophistication of the model that could be constructed (Bentler & Chou, 1987). Thus, only five items for each of the money beliefs on the MBQ were included in the covariance matrix. The five selected were those items with the highest factor loadings in the initial scale development, except that variables that had a high degree of common variance with other variables were not included.

In deriving the covariance matrices, pairwise deletion was used for the treatment of missing values. The use of listwise deletion would have impaired the power of the testing by reducing the number of participants for each of Stages 1, 2

and 3 to 134, 247 and 203, respectively. Using pairwise deletion, the minimum numbers of cases in the covariance matrices were 191, 272 and 253. A sensitivity analysis carried out with the Stage 1 data indicated that the effect of using pairwise rather than listwise deletion was to increase the reported comparative fit indices by approximately 4 percentage points.

As to assessment of model fit, a simple chi-squared goodness of fit test was considered overly rigid (Bentler & Bonett, 1980; Cudeck & Henly, 1991), so the comparative fit index (CFI) was used to assess model fit. This index compares the fit of a given model to a model of uncorrelated variables, with a correction for small sample size bias (Bentler, 1992b). The Non-Normed Fit Index (NNFI) also quantifies the variance accounted for the model, taking into account model parsimony (Bentler, 1992b) and was also reported for completeness. Significance levels for tests of paths within the model were established at  $p < .01$ .

The procedure undertaken was to use the Stage 1 data in developing a model to describe money beliefs, then to test that model by assessing its degree of fit with the Stage 2 and 3 data. As this work was exploratory, testing of alternative models was appropriate (Hayduk, 1987). The cognitive-motivational-relational model was hypothesized, in which income predicted beliefs, which in turn predicted Quality of Life (QOL). An equally plausible model, the Direct model, would place income as a direct predictor of quality of life. These models are illustrated in Figures 4.1 and 4.2.

## Results

### Quality of Life Scores

Table 15 shows participants' mean scores on the SWL, PQOL and PANAS questionnaires used to measure quality of life. These means are consistent with those reported by the authors of those questionnaires.

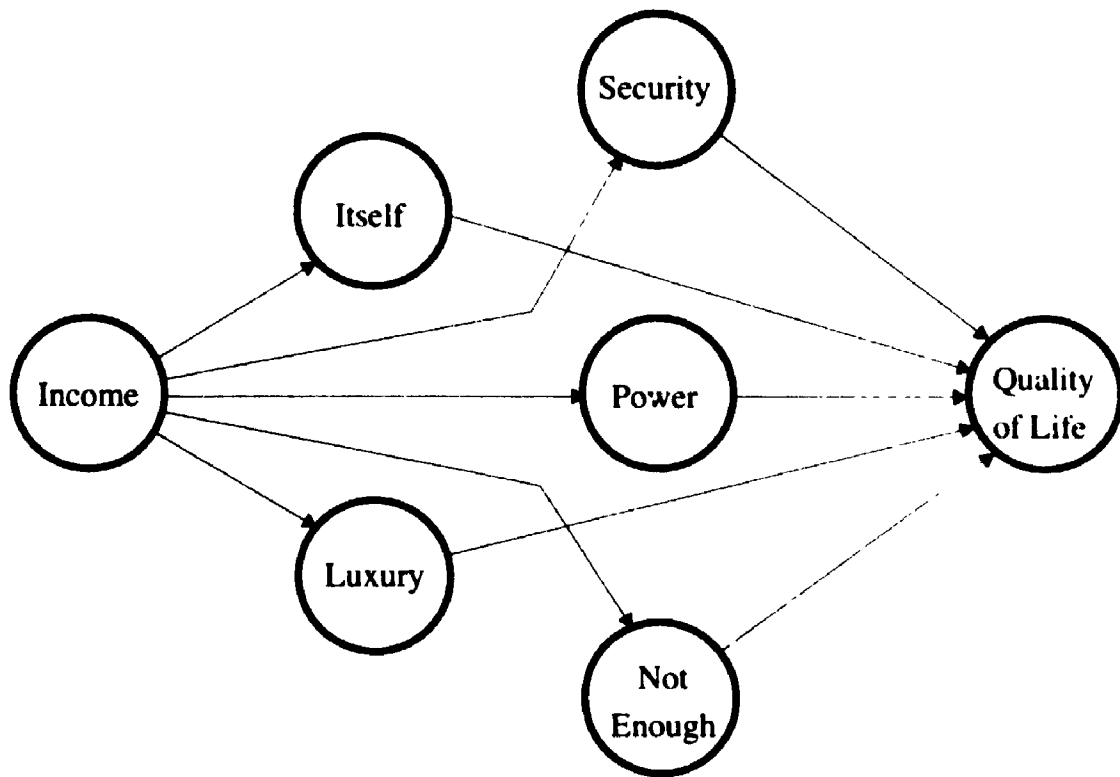


Figure 4.1: CMR Model

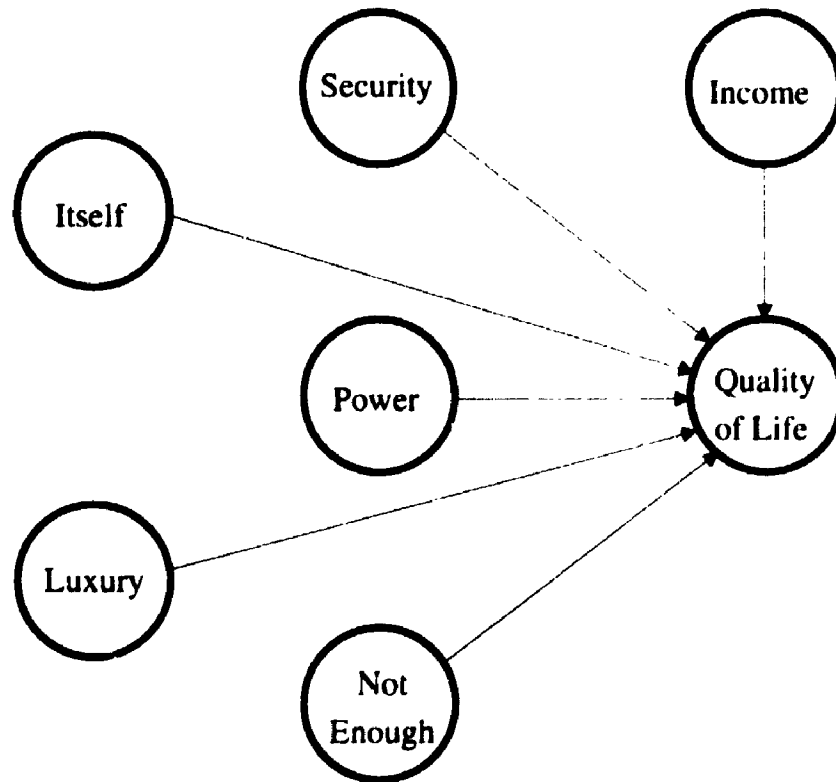


Figure 4.2: Direct Model

**Table 15: Quality of Life questionnaire statistics**

	1st stage sample (n=210)			2nd stage sample (n=336)			3rd stage sample (n=267)		
	mean	standard deviation	coeff alpha	mean	standard deviation	coeff alpha	mean	standard deviation	coeff alpha
<b>SWLS</b>	4.791	1.245	.7921	5.057	1.233	.8257	4.828	1.321	.8229
<b>PQOL</b>	4.852	0.822	.8008	4.714	0.732	.7288	4.782	0.856	.8082
<b>PANAS - positive</b>	3.591	0.512	.8016	3.534	0.619	.8538	3.553	0.580	.8394
<b>PANAS - negative</b>	2.180	0.628	.8834	2.162	0.661	.8405	1.947	0.685	.8955

### CMR model construction

As a starting point for model development, a multiple regression procedure was used to determine which money beliefs could be expected to predict quality of life (QOL) by using a multiple regression procedure. Although all beliefs were entered in the stepwise procedure, only two, **Security** and **Not Enough**, were found to be significant predictors of the quality of life measures. Thus, model construction began with those beliefs.

The cognitive-motivational-relational model was developed using the **Not Enough** and **Security** beliefs. These beliefs were set as predictors of QOL, while they in turn were predicted by Income. This model had a comparative fit index of .936 (see Table 16) with the data collected in Stage 1, an excellent fit to the data. Path coefficients were significant for all paths except that of Income to **Security** beliefs ( $p < .01$ ).

Alternative models were run to assess whether other beliefs should be added to the model. In each, one of the remaining beliefs was added to the model to determine if this resulted in a significant path coefficient to QOL. The fit indices for those models are presented in Table 16 (equations for discarded models are not presented). Neither **Power**, **Money Itself** nor **Luxury** had significant path coefficients with the Quality of Life factor, and the models including them had poorer fits.

It was also noted that the cognitive-motivational-relational model included a high correlation between **Security** and **Not Enough**. A one-factor solution was also tested to determine whether a higher order latent factor would better describe the data. It did not (fit indices are reported in Table 16).

When it had been established that the cognitive-motivational-relational model using **Not Enough** and **Security** provided the best fit of the data gathered in Stage 1, the model was applied to the data gathered in Stages 2 and 3. CFIs for these models were .923 and .896, confirming the replicability of the model. However, none of the path coefficients in the Stage 2 group were significant,

Table 16: Cognitive-motivational-relational model: Fit indices of alternatives tested

Model Description	data set	n	chi-square	df	Nonnormed fit index	Comparative Fit Index
<u>Rejected models</u>						
Income > Security, Not Enough + Power > QOL	stage 1	191	258	184	.882	.897
Income > Security, Not Enough + Itself > QOL	stage 1	191	251	184	.893	.906
Income > Security, Not Enough + Luxury > QOL	stage 1	191	283	184	.839	.859
(Security and Not Enough) as one	stage 1	191	211	103	.779	.810
<u>Final CMR Model</u>						
Income > Security, Not Enough > QOL	stage 1	191	136	100	.924	.936
Income > Security, Not Enough > QOL	stage 2	272	149	100	.908	.923
Income > Security, Not Enough > QOL	stage 3	253	170	100	.876	.896



indicating that neither the money beliefs nor income were predictors of quality of life for that group.

The cognitive-motivational-relational models for the Stage 1 and Stage 3 data are presented in Figures 5 and 6<sup>1</sup>. The **Not Enough** belief had negative standardized path coefficients to **QOL** of .89 and 1.22 for the Stage 1 and Stage 3 data, while the path coefficient of the **Security** belief was .45 and .88. With the Stage 1 data, **Income** had a coefficient of .23 with the **Not Enough** belief but was not a significant predictor of the **Security** belief. With the Stage 3 data, **Income** did not significantly predict either belief. Also, while a one-factor model of **Not Enough** and **Security** had not improved the fit of the Stage 1 data, the correlation between the two was much higher, at .79, with the Stage 3 data. This suggests that collapsing the two into a single factor may have improved the fit.

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<sup>1</sup> Standardized path coefficients are presented in the illustrated models. Unstandardized path coefficient equations for all the models reported in this Chapter are presented in Appendix 3.

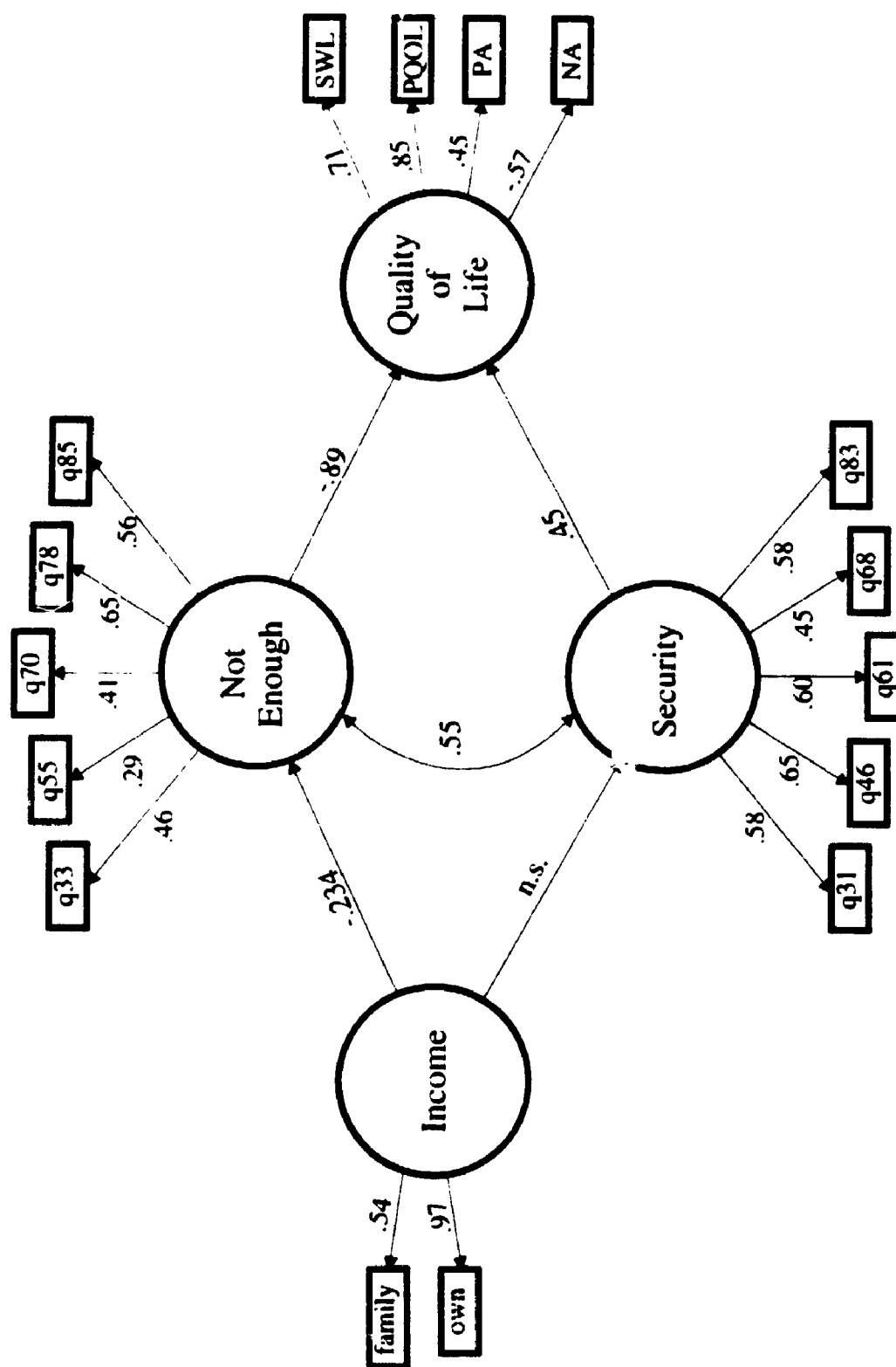


Figure 5: Cognitive-motivational-relational Model - Stage 1 Data

Note: All standardized paths quantified are significant at  $p < .01$

For clarity, error paths, though significant, are not illustrated.

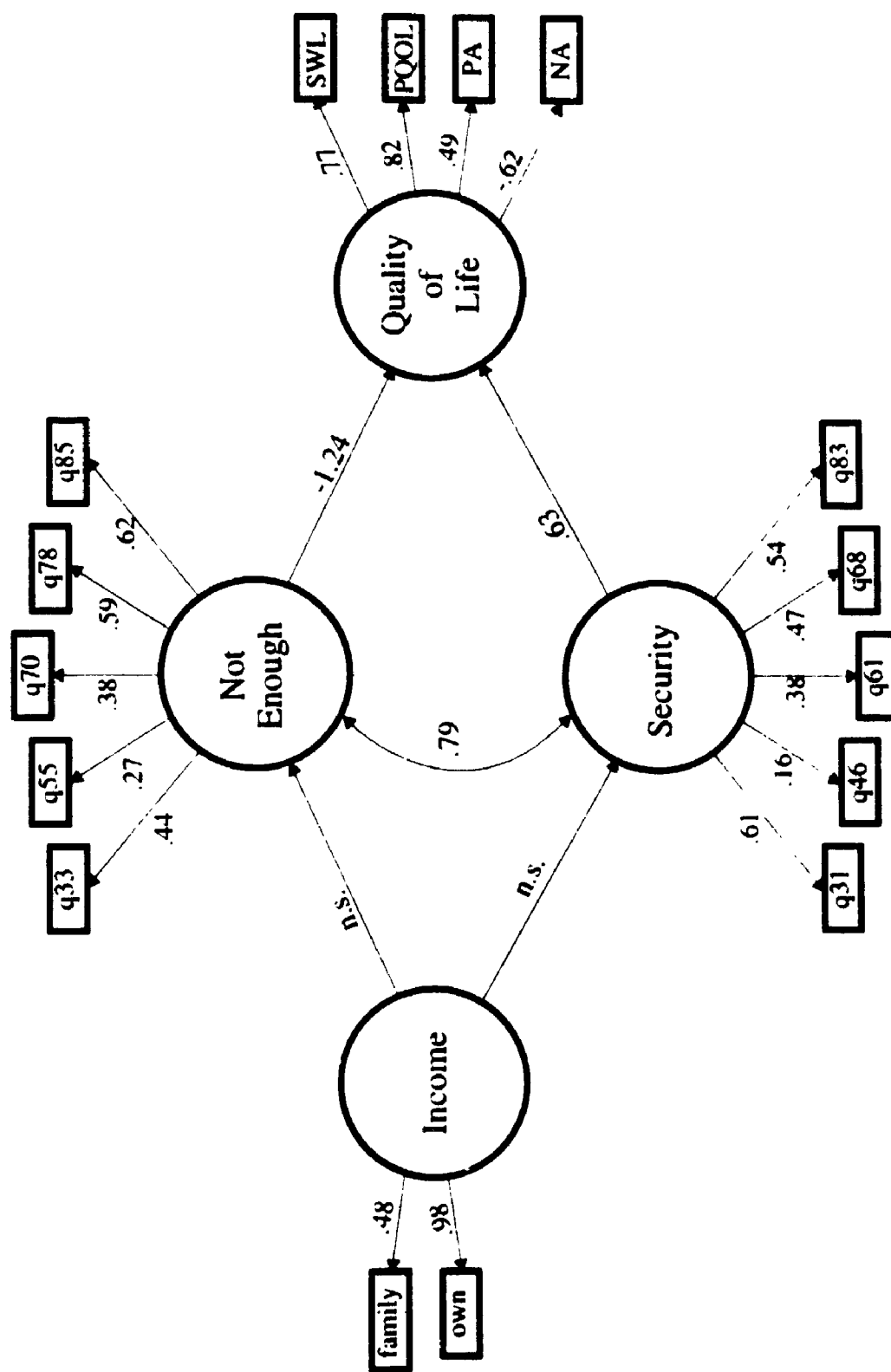


Figure 6: Cognitive-motivational-relational Model - Stage 3 Data

Note: All standardized paths quantified are significant at  $p < .01$

For clarity, error paths, though significant, are not illustrated.

### Direct model construction

The two significant beliefs detected in the cognitive-motivational-relational model were used to create the Direct model. Using the data collected in Stage 1 of the data collection, a model was tested where the **Not Enough** and **Security** beliefs and **Income** all predicted **QOL**. The model had a comparative fit index of .932, also an excellent fit to the data. However, **Income** was not a significant predictor of **QOL**, and the path coefficients for **Not Enough** and **Security** were substantially the same as those in the cognitive-motivational-relational model. This model was tested with the Stage 2 and 3 data, and the fit indices are reported in Table 17. **Income** was a significant predictor of **QOL** for the Stage 2 and 3 data, with standardized path coefficients of .18 and .21. Again, for the Stage 2 data, beliefs were not significant predictors of **QOL**. Models for the three data sets are presented in Figures 7, 8 and 9.

**Table 17: Direct Model: Fit indices across three data sets**

<b>Model Description</b>	<b>data set</b>	<b>n</b>	<b>chi-square</b>	<b>d/f</b>	<b>Nonnormed fit index</b>	<b>Comparative Fit Index</b>
<b>Income, Security, Not Enough &gt; QOL</b>	<b>stage 1</b>	<b>191</b>	<b>139</b>	<b>101</b>	<b>.919</b>	<b>.932</b>
<b>Income, Security, Not Enough &gt; QOL</b>	<b>stage 2</b>	<b>272</b>	<b>149</b>	<b>101</b>	<b>.911</b>	<b>.925</b>
<b>Income, Security, Not Enough &gt; QOL</b>	<b>stage 3</b>	<b>253</b>	<b>173</b>	<b>101</b>	<b>.874</b>	<b>.894</b>

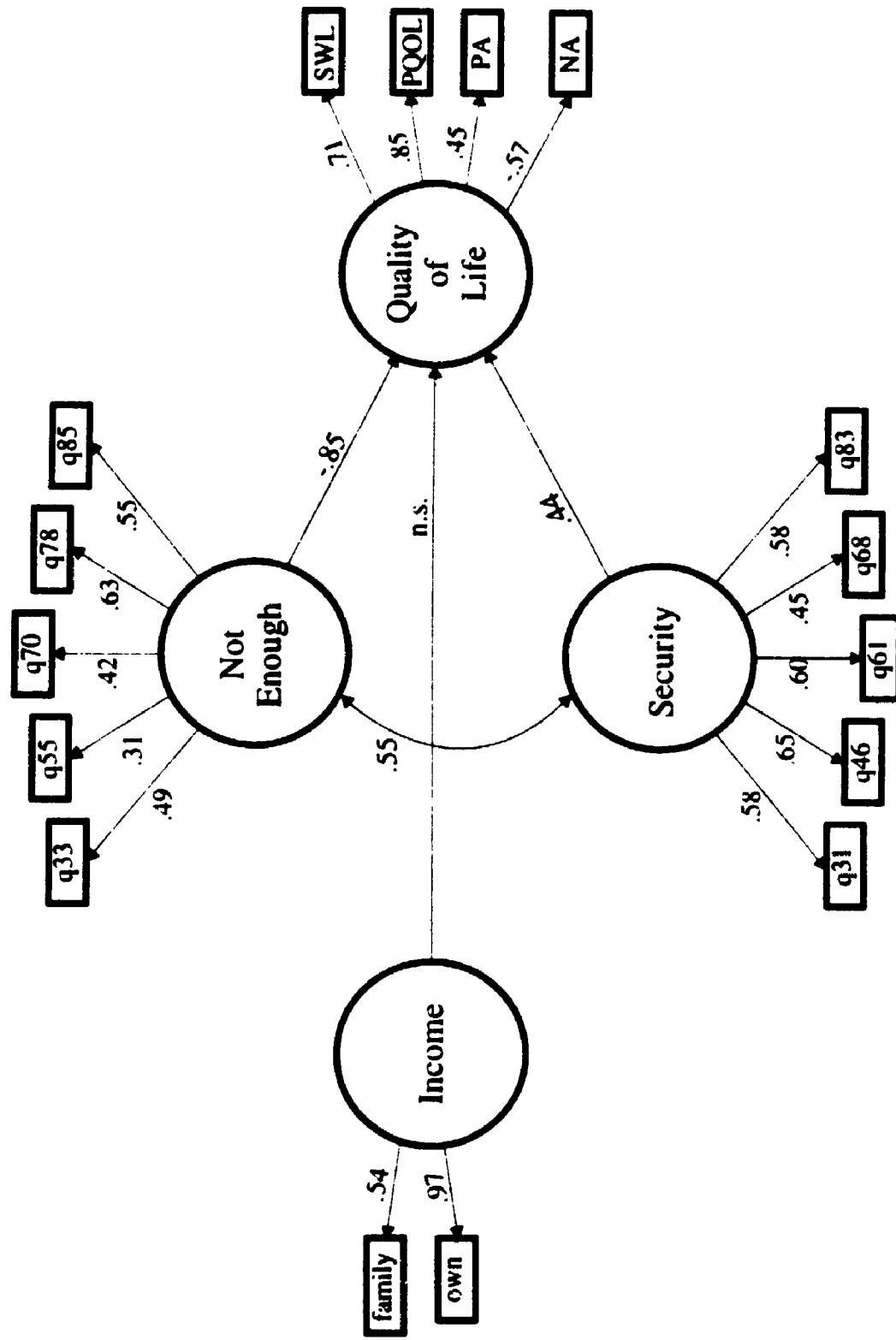


Figure 7: Direct Model - Stage 1 Data

Note: All standardized paths quantified are significant at  $p < .01$ . For clarity, error paths, though significant, are not illustrated.

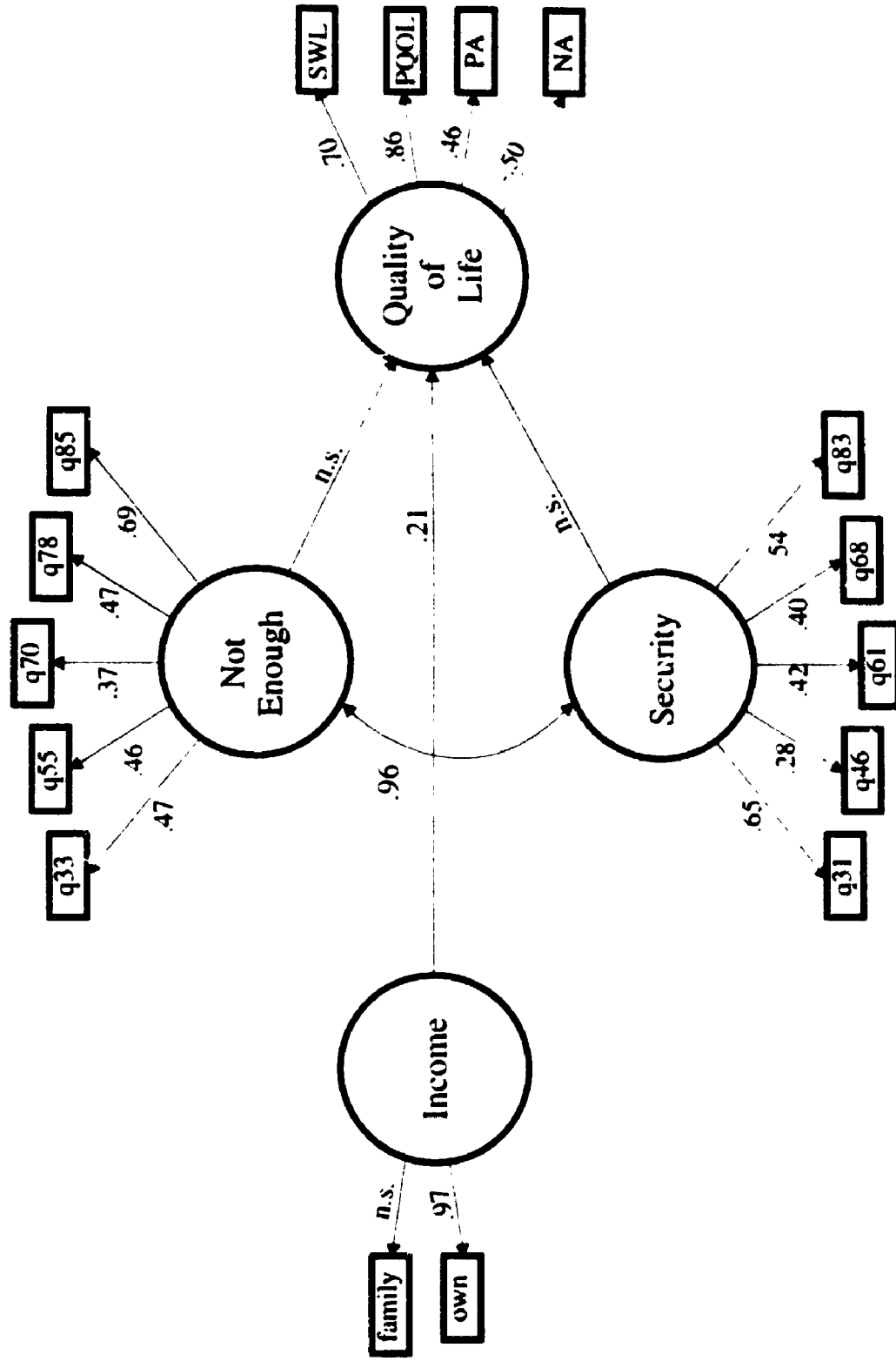


Figure 8: Direct Model - Stage 2 Data

Note: All standardized paths quantified are significant at  $p < .01$

For clarity, error paths, though significant, are not illustrated

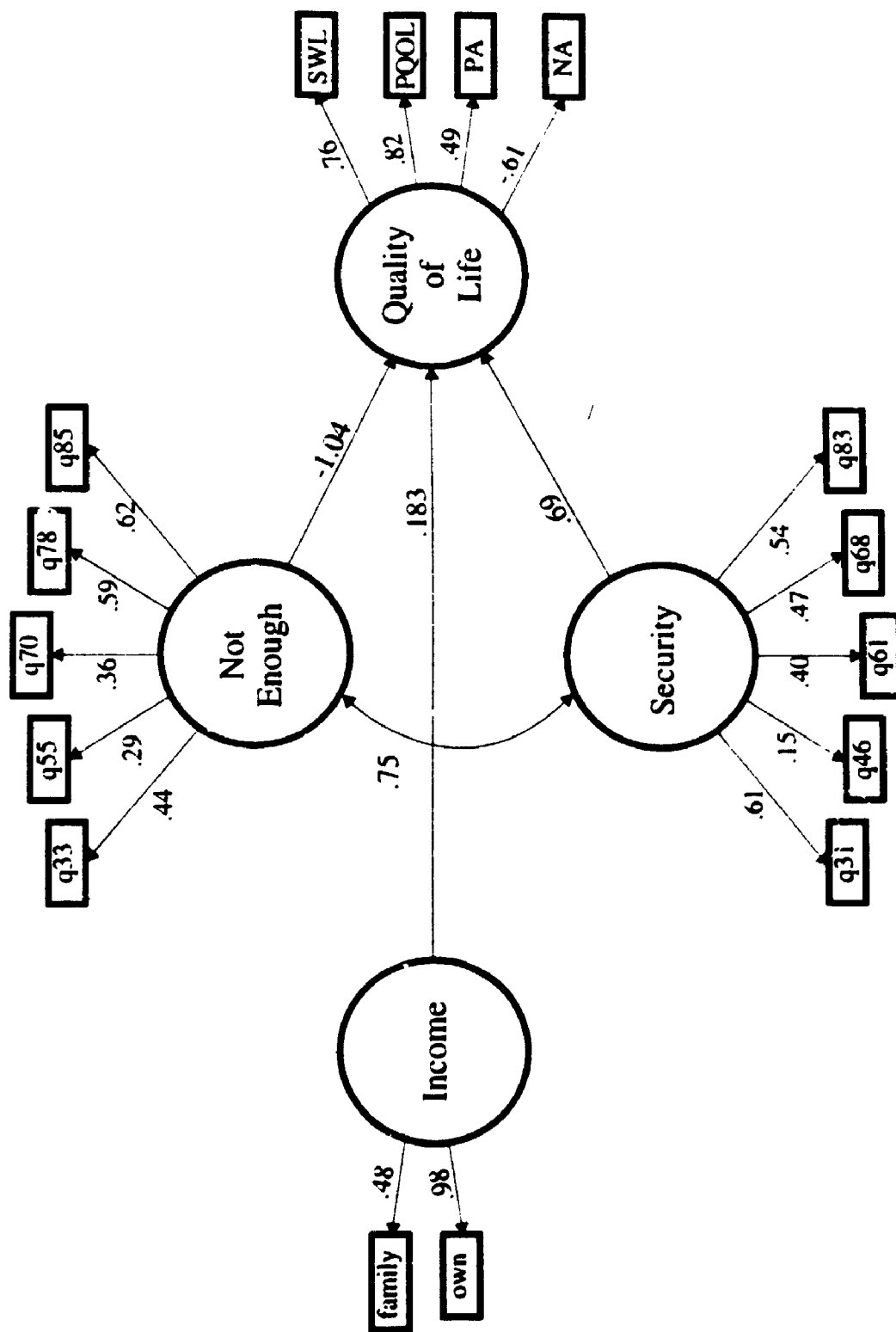


Figure 9: Direct Model - Stage 3 Data  
 Note: All standardized paths quantified are significant at  $p < .01$   
 For clarity, error paths, though significant, are not illustrated



### Appraisal model construction

At this point in the analysis, a hypothesis was generated about a third possible model. Both the cognitive-motivational-relational model and the Direct model had shown that, for a more broadly aged sample, the **Not Enough** belief had a high correlation with **QOL**. The possibility emerged that this latent factor might represent a cognitive appraisal of the individual's situation, rather than a longstanding money belief. If this were the case, following the structure of the cognitive-motivational-relational model, then the other money beliefs might predict the **Not Enough** belief, which would in turn predict **QOL**. This hypothesized model is illustrated in Figure 10.

The hypothesized Appraisal model was tested with the Stage 1 data. Inspection of the results and the EQS program diagnostics indicated that the **Not Enough** belief was predicted by the **Power** and **Luxury** beliefs, but not by the **Money Itself** belief. Also, the **Security** belief was a direct predictor of **QOL**; an attempt to mediate the effect of the **Security** belief through the **Not Enough** belief resulted in a poorer model fit. The final model constructed had a comparative fit index of .854 and a non-normed fit index of .835 (chi-square was 414 (d.f. = 288);  $p < .001$ ). The model, presented in Figure 11, suggests that **Power** and **Luxury** beliefs might predict the **Not Enough** belief, with standardized path coefficients of .53 and .55. **Power** also had a negative path coefficient to **Security** of .36. However, when the model was tested with the Stage 3 data<sup>2</sup>, the coefficients of **Power** and **Luxury** to **Not Enough** and **Security** were not significant, and the comparative fit index was only .817. The conclusion was drawn that the **Not Enough** belief did not represent an Appraisal.

There was one other factor that had to be considered which would indicate that the **Not Enough** belief was an appraisal. This was the possibility that the belief was rooted in the construal of a financial situation that had not been

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<sup>2</sup> As the **QOL** of subjects in Stage 2 was not predicted by money beliefs, further testing with this group was not appropriate.

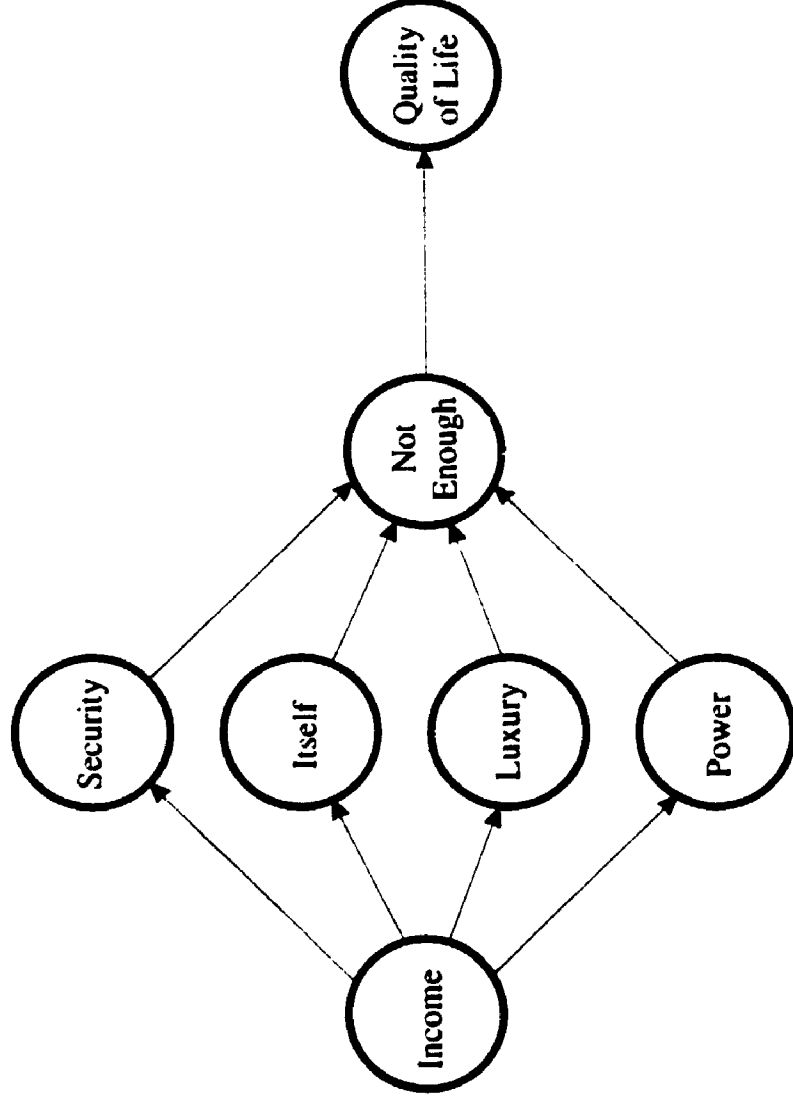
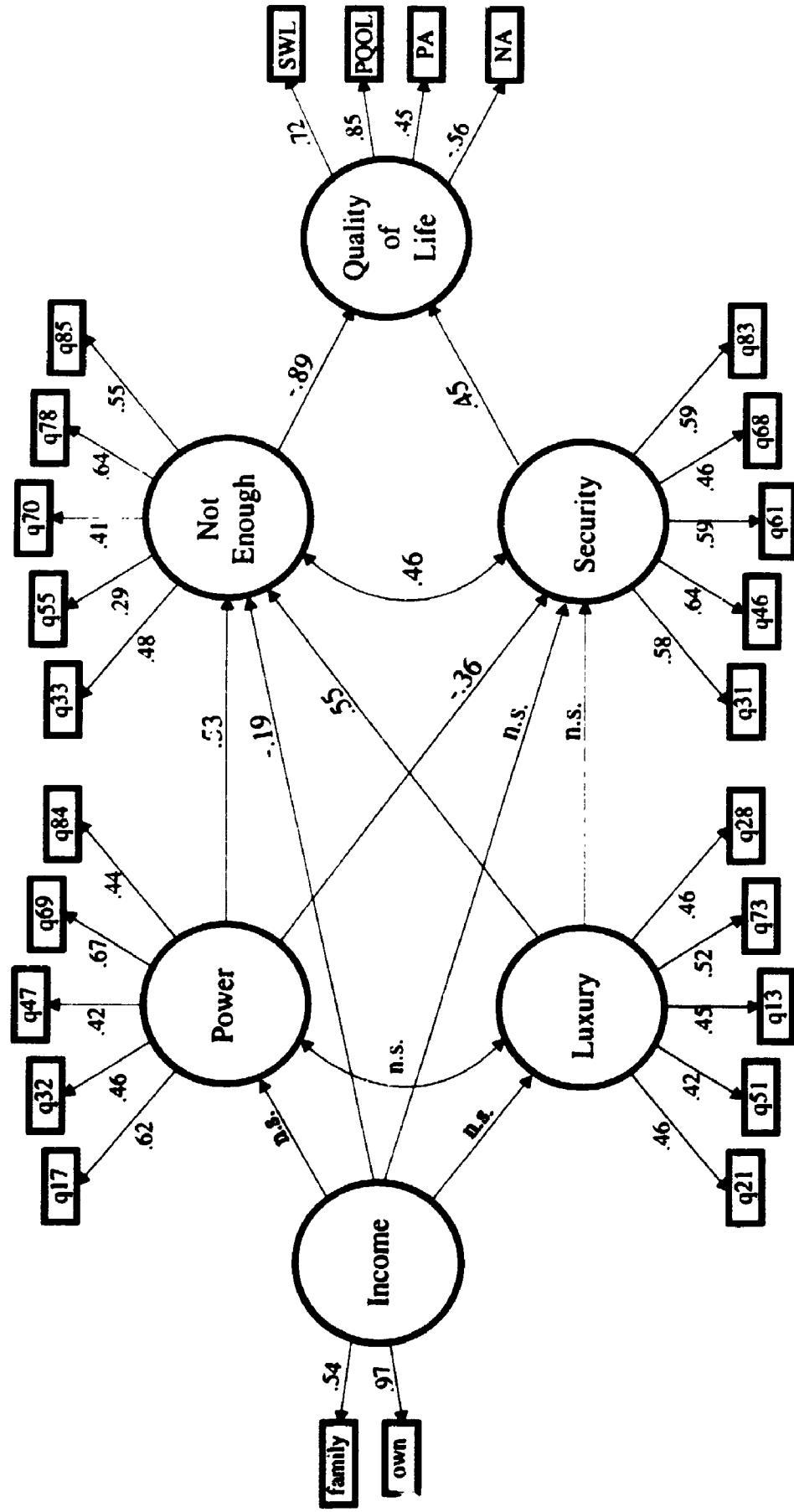


Figure 10: Hypothesized Appraisal Model



included in the model. In other words, an individual might subscribe to the **Not Enough** belief because s/he was cognizant of a broad picture of his or her financial situation. This broader picture might include information about expenditures or about financial constraints. This possibility was not considered until after the data were collected and, hence, the proposition that expenditures or other financial constraints might contribute to the **Not Enough** belief could not be tested. However, a single measure of debt had been taken for Stages 1 and 3. By using debt as a crude measure of expenses, it was possible to test this possibility. A model was run with the Stage 1 data using the single-item measure of **Debt** as a predictor of the **Not Enough** belief. However, the path coefficient was not significant.

### Summary

The results of this research showed that quality of life is related to certain beliefs held about money for samples of the general population, but not for samples of a student population. With both the Stage 1 and Stage 3 groups, the **Not Enough** and the **Security** belief had significant path coefficients with **QOL**. However, the influence of income on **QOL** differed from group to group. With the first group, **Income** predicted the **Not Enough** belief, lending support to the cognitive-motivational-relational model. With the Stage 3 group, **Income** predicted **QOL** directly, which did not support the cognitive-motivational-relational model.

## CHAPTER 5

### DISCUSSION

#### Summary of findings

The goals of this study were to identify potential beliefs about money, construct a psychometrically sound measure of those beliefs, and test whether any such beliefs intervened in the relationship between income and quality of life. These goals were largely met. The qualitative and quantitative studies of money beliefs demonstrated that, while a larger number of beliefs about money can be identified, five (security, power, not enough, itself and luxury) can be reliably measured in a Canadian population. Of those, the belief that there cannot be enough money has a high negative correlation with quality of life, and the correlation of the belief that money provides security is also significant. These findings support and clarify previous work on money beliefs, shed light on how beliefs may affect the relation of money to quality of life, and point to future areas of fruitful research.

#### Qualitative study

The qualitative study provided material for developing the constructs of money beliefs that were used in creating the MBC. Ten beliefs about money were identified and described. It was also found that those who had financial goals had lower scores on the satisfaction with life scale, as did those who were curious about how much money other people have. Also, those who believed it was impossible to get enough money were more likely to suggest that money was for power. This suggested that a tendency to compare one's self with one's own money goals or with others' money achievements detracts from satisfaction with life, or vice versa. In social comparison theory it is argued that individuals compare themselves to others to get appraisals of themselves (Taylor et al., 1990). This might reduce satisfaction with life if the comparisons are unfavourable. But the data did not show that those who are curious or have goals are any poorer

than are others. The dissatisfaction did not appear to have stemmed from any obvious lack. This argues against social comparison explanations of the relationship between income and quality of life. It would support the cognitive-motivational-relational model of money beliefs, if the source of the dissatisfaction stemmed from a perceived gap between aspirations and wealth, rather than the gap between others' and one's own wealth.

### The Money Beliefs Questionnaire

#### Assessment

The MBQ measured five beliefs about money, using scales of 8 to 11 positively and negatively keyed items, with initial reliabilities ranging from .734 to .78 and reproduced reliabilities of .70 to .83 and .64 to .76. The MBQ was initially tested and cross-validated on a household population. The scales had no significant correlation with a measure of social desirability responding. With the unsurprising exception of the **Luxury** scale, modest correlations with a measure of impression management responding were obtained.

The beliefs on the MBQ scale were correlated with one another, despite efforts to ensure independence of the scales. The questionnaire was developed using orthogonal factor analysis to derive the scales, and item analysis indicated the items with the best discriminant validity for retention. The extent of the correlation is not unusual, considering the single subject nature of the questionnaire. The MBBS, MES and MAS tested also had a high proportion of significant interscale correlations.

The five reliably measurable scales on the MBQ were **Security, Power, Not Enough, Itself** and **Luxury**. **Security, Power, Money Itself** and **Luxury** corresponded to six of the ten original constructs reported in Chapter 2 (security and independence collapsed into the **Security** scale, and status and power collapsed into **Power**). They also corresponded to the most commonly cited beliefs in the literature, for example, in Dressler (1988), Heilbroner (1958),

Klebenow & Lowenkopf (1991), Simmel (1991/01), Stacey (1982), Warneryd (1989) and Wiseman (1974).

There were beliefs mentioned in the qualitative analysis that did not replicate in the questionnaire. However, it had been expected that some beliefs might not hold up to the psychometric process and a broad scope of beliefs had been sampled in anticipation that not all would be independent constructs. Still, the question remains of what happened to those beliefs. One possibility is that the items for those constructs were not phrased clearly enough, so did not lead to the development of a good measure. Or, the sample size may have been too small to obtain a larger number of measurable factors, especially if a construct was not salient to a sufficiently large proportion of the population. Then too, the explanation for the loss of a construct may be specific to that construct.

Constructs that did not carry forward to the MBQ were the beliefs that money is for **Basics**, **Sex/Family**, **Freedom** and **Transformation**. The **Basics** belief, while it was endorsed by most qualitative study participants, may have been too simple and endemic to have emerged as a distinct factor on psychometric testing. The **Transformation** belief may have been too self-contradictory, including as it did items which indicated positive transformations and items which indicated negative transformation. The **Freedom** belief seems to have been insufficiently distinct from the **Security** belief (the correlation of the MBQ **Security** scale and the MES **Freedom** scale was significant, at .37). Most puzzling is the **Sex/Family** belief. Perhaps because this construct ran counter to 'politically correct' ideology or socially desirable behaviour, its items evoked sporadic responses. Then too, the base rate of individuals endorsing those beliefs may have been too low<sup>1</sup>, given the sample size, to have supported a discernable factor.

A new belief emerged in the development of the MBQ. Four of the belief constructs contained in the MBQ are consistent with the qualities attributed to

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<sup>1</sup> Janus and Janus (1993) report, for example, that only 20% of men in their sample of 735 admitted to having had sex for money.

money in the theoretical and empirical literature - **Security, Power, Luxury**, and a fascination with **Money Itself**. These represent the intangible qualities that money is supposed to provide and have been identified by Dressler (1988), Heilbroner (1958), Klebanow & Lowenkopf (1991), Simmel (1991/01), Stacey (1982), Warneryd (1989) and Wiseman (1974), to name a few. The **Not Enough** belief, however, had not been anticipated from the literature review or in the qualitative study (although with hindsight one might argue that **Not Enough** was presaged in the question about whether one could ever have enough money). That the **Not Enough** belief might have been an anomaly specific to the Stage 1 sample was refuted by its replication across Stages 2 and 3, especially because another belief (**Limitation**) had emerged from the initial sample, failed to be reliably replicated, and was discarded.

What does the **Not Enough** belief mean? As stated in the construct definition drawn from its items,

Without enough money, one has less ability to enjoy one's life, less choice in how one spends one's time, fewer options of what one does or what one owns. Lack of money leads to discontent, a feeling of being trapped, perhaps even of hopelessness. There is sense that, if only one had more money, one's life would be less dreary.

With reference to the other money questionnaires, the **Not Enough** belief correlated highly with the **MBBS Obsession** scale, the **MES Good** scale and the **MAS Anxiety** scale. The items on the first two scales are fairly diffuse, representing as they do the first factors in the solutions obtained for their respective questionnaires. The items in the third (**Anxiety**) scale indicate anxiety associated with spending behaviours. Drawing from the scales with which it correlates, the **Not Enough** belief may be associated with a desire to reduce anxiety, an awareness of dysfunctional spending behaviour, an attribution of good qualities to money, and beliefs and behaviours associated with using money as a means of gaining control.

This belief that money solves problems in some impalpable way confirms Simmel's (1991) argument that money, as the measure of everything, becomes an



abstract symbol of all that one might possibly attain or become. This belief exists apart from all the things that money is supposed to, and does, represent - power, security, luxury. This belief may be instrumental in the development and maintenance of dysfunctional money behaviors (Wachtel & Blatt, 1990) or personality disorders (Nikelly, 1992). The potential significance of the emergent **Not Enough** belief became clearer when the next phase of the research, in which a model of money beliefs and happiness was completed.

### Comparison to Theory

The constructs contained in the MBQ fit within the psychoanalytic and symbolic perspectives, and fit partially with the social comparison approach. The psychoanalytic and symbolic perspectives permit money to assume a broad range of meanings -- either to provide one with emotional support to withstand ego threats (psychoanalytic) or to compensate for existential loneliness (symbolic). The MBQ measures beliefs about intangible attributes that money can provide, which fit comfortably within those frameworks, and can be used to test theories about types of personality and money styles. For example, Doyle's (1992) money types include a Driver, who might be predicted to score highly on the **Power** and **Money Itself** scales; an Amiable, who would score highly on the **Security** scale; an Analytical, who would score highly on the **Not Enough** and **Power** scales; and an Expressive, who would score highly on the **Not Enough**, **Power** and **Luxury** scales.

The social comparison viewpoint has a narrower focus; it explains specific purposes for which one obtains and spends money. Hence, it does not incorporate all the beliefs about money contained in the MBQ. However, the MBQ constructs of **Not Enough** and **Power** could probably be used to test social comparison theory. The MBQ **Power** construct seems to reflect social comparison beliefs of expecting that money will give one prestige, status and standing in the community, and the **Not Enough** belief may reflect some awareness of falling short of comparison others.

### Comparison to other Questionnaires

The MBQ compared well to the other money scales. The confirmatory factor analysis of the final MBQ showed a moderate fit to the data. This was comparable to the MAS and MES, taking the number of items on the scales into account, and is better than the fit of the MBBS. It is noteworthy that none of the scales had an excellent fit to the data.

With respect to response bias, only the MBQ has a balance of positively and negatively keyed items. The MES outperformed the MBQ as having lower correlations with social desirability responding or impression management responding, but the MBBS and MAS were both worse than the MBQ in that they had equivalent correlations with impression management and, for both the MBBS and MAS, half of their scales were significantly correlated with measures of social desirability responding. Finally, the number of items on all scales of the MBQ is higher, meaning that the MBQ taps a broader proportion of each domain.

Part of the impetus for the MBQ was a concern that other money questionnaires measured behaviours as well as beliefs. This was in contradiction to social psychological theory, which distinguishes between beliefs and behaviours (Ajzen, 1988; Heckhausen, 1991). The correlations among the MBQ scales and those of the MBBS, MAS and MES were not entirely as was predicted from review of the scale content. This lends credence to the supposition that certain beliefs about money are distinct from, and do not necessarily lead to, certain behaviours. It also supports the exercise here, which was to develop a belief scale free of behavior measures. In the MBQ, a tool has been created for use in future work to delineate exactly which behaviours accompany which beliefs.

### Validation Issues

An assessment of the MBQ is incomplete without mentioning testing of its validity. Typically, the instrumental validity of a new measurement device is tested by comparing its results with those of another test designed to measure the same constructs. In the absence of any published scale which measured the domains contained in the MBQ, an attempt was made to create another questionnaire to

validate the MBQ, the Preferences in Life questionnaire (PIL). The PIL had a forced-choice format where subjects were asked to select from high and low anchors on items representing security, power, luxury, money itself and feeling a sense of need. The attempt failed in two ways. The scales of the forced choice questionnaire had low alpha reliability coefficients, and the scales had only sporadic correspondence to the MBQ scales. The low alphas can be attributed to poor initial construction of the questionnaire. The failure to correspond to the MBQ scales can be attributed to low alpha reliability and high intercorrelations among the MBQ constructs (or, of course, to low validity of the MBQ). It can also be attributed to the content of the PIL. The PIL was designed to measure constructs of security, power, etc., but not to measure constructs that *money would purchase* security, power, etc. This problem is of a poor validation match, where there is only partial overlap among the questionnaires being compared and is a function of the newness of the field. Yamauchi and Templer (1982) had similar difficulties in their attempt to validate the MAS. Clearly, there is still a need for an appropriate measure against which to validate the MBQ.

### Money Beliefs and Quality of Life

As anticipated, it was possible to construct a model of money beliefs, income and quality of life. The models that were presented in Chapter 4 demonstrated clearly that the relationship among money beliefs (specifically, that one needs enough money and that money provides security) and quality of life was stronger than the relationship between income and quality of life. The standardized regression coefficient of income on quality of life ranged from .10 to .22 in all the models tested, which is consistent with the majority of results reported in the literature.

Three models of money beliefs and quality of life were developed. The cognitive-motivational-relational model, in which Quality of Life was predicted by the **Security and Not Enough** beliefs, in turn predicted by Income, had an excellent fit to the data across three samples. The Direct model, in which Income

predicted Quality of Life directly, also had an excellent fit. The third model tested, the Appraisal model, contained promise for future directions in testing. It showed that **Power** and **Luxury** beliefs might predict the **Not Enough** belief (the role of the **Power** belief might have been predicted by the qualitative study), but the impairment in model fit when applied to a second sample allowed no conclusions to be drawn.

In both the cognitive-motivational-relational and the Direct models, the standardized regression coefficients between the Quality of Life and the **Not Enough** and **Security** beliefs were high, ranging from .85 to 1.24 for the **Not Enough** belief and .44 to .69 for the **Security** belief. This suggests that individuals who view money as a store of wealth, a hedge against future need and a source of independence and autonomy are more likely to also experience higher quality of life. Contrarily, those who believe that money should be obtained to ensure contentment, time off, and as means of staving off feelings of hopelessness and entrapment are less likely to be experiencing higher quality of life. Assurance about the reported relationships was provided by the use of multiple measures of each construct, and replication across a second sample.

The nature of the beliefs which were found to be significantly related to quality of life supports the research on financial satisfaction reviewed in Chapter 1. In that body of research, measures of financial satisfaction were found to be more highly correlated to quality of life than measures of income. The present study did not measure financial satisfaction, as its focus was to identify those beliefs which are related to quality of life. However, the **Not Enough** belief which emerged in the MBQ might be considered a form of financial satisfaction. The belief encompasses a sense of satisfaction (or rather, a sense of wanting to be satisfied) with one's financial status. The **MBQ Not Enough** measure also bore a higher correlation to quality of life than did Income.

Social comparison theory has been proposed to account for the relationship between money and quality of life. The findings of this study provide little support for or against that theory. This research failed to support social

comparison theory in that the items on the social comparison construct tested in Stage 1 of MBQ development failed to converge on an identifiable factor. This suggests that individuals do not explicitly use money as the basis of social comparison. The **Power** belief contains items associating money with prestige, status, etc., but this construct had no significant correlation with quality of life. On the other hand, certain money beliefs (**Security** and **Not Enough**) did relate to quality of life, and social comparison theory cannot be ruled out until it has been established that social comparisons do not influence the formation or maintenance of those beliefs.

### CMR Model of Money and Quality of Life

The question of whether income predicts quality of life, either directly or through money beliefs, remains open. Different results were found with the Stage 1 and Stage 3 groups in that respect. In Stage 1, quality of life was predicted by the **Not Enough** belief, and not by Income. In Stage 3, Income acted as a significant direct predictor of quality of life, without the mediation of the **Not Enough** belief. One possible explanation for this lies in the sample population. For Stage 3, an effort had been made to recruit poorer subjects. In lower income brackets, failure to obtain a minimum income level necessary for basic needs will directly impair quality of life (Maslow, 1954; Veenhoven, 1990; Wolfson et al., 1993). Thus, it may be that there are categorical differences in how the cognitive-motivational-relational model will work for the poorer and for the not-so-poor.

The cognitive-motivational-relational model is still promising, and a number of variables remain to be measured and added to it, including measures of goal commitments, appraisal processes, money behaviours and financial situations. Most of these were discussed in the first chapter and will not be revisited here, but the research findings suggest that the goals might take prominence in how income and quality of life relate.

There is a strong suggestion that goals might interact with money beliefs in predicting quality of life. Goal striving theory has been used to explain the relationship between income and quality of life (Diener et al., 1995). The notion

that goals operate in the belief/quality of life equation explains the finding that, for the student sample in Stage 2, no money beliefs significantly predicted quality of life. A study by Diener and Fujita (1994) set out to assess the effect of financial goals in a student population and failed because the students tended not to have such goals.

The results of the qualitative and MBQ studies indicate that financial goals might work against quality of life. In the qualitative study, those who had clear financial goals were less satisfied with life. The models of money, beliefs and quality of life suggest that individuals who believe they need money (and presumably would have financial goals to obtain it) have lower quality of life. It is possible that having financial goals, coupled with the expectation or belief that one cannot obtain enough money, is what predicts poor quality of life. This hypothesis can be tested using the MBQ with measures of financial goals and satisfaction with life.

### **Practical applications**

The emergence of the Not Enough belief was surprising and, at the same time, predictable, given the cultural climate in North America at the moment. Surprising because few of the respondents had any obvious need for money. There were no eviction notices on their doors; there were cars in their driveways and televisions in their living rooms. All appeared healthy, well fed and groomed, and their children seemed likewise. Yet a fair number of them believed that they could not get enough money. This belief was predictable if one subscribes to the views expressed by Krueger (1988), Luepnitz (1988), Richardson and Manaster (1992), and Smith (1993), that the post-modern economy, with its emphasis on production, marketing and consumption of goods, leads to maladjustment in individuals who struggle to maintain excessive consumption patterns.

Leaving aside a discussion of the moral ramifications of a consumer society, there is growing conviction that spending excesses cause difficulties for certain individuals (d'Astous, 1990; Krych, 1989). The possibility exists that the Not

**Enough** belief can be implicated in some way in these problems. If so, this is a helpful sign, since a large body of research indicates that maladaptive beliefs are susceptible to being changed with the proper interventions (see, for example, Martin, 1987; Meichenbaum, 1977; Perris, 1988).

### Limitations

Of course, the conclusions and suggestions made here are in light of the limitations in the research. These limitations can be found in the design of the study, the subject population, the measures, and statistical procedures used.

### Design

The cross-sectional nature of this study permits no conclusions to be drawn about any cause and effect relationship among beliefs and quality of life. While the cognitive-motivational-relational model suggests that beliefs lead to quality of life, the reverse is also possible (Headey et al., 1990). To establish the direction of causality (if any), a longitudinal experimental design is needed, in which the measures are given to the same subjects at different points in time and the effects on some variables of changes in other variables can be measured. Alternately, an experimental manipulation can be employed, although it may be difficult to conjure up financial situations realistic enough to permit generalization of the results of experiments in this realm.

A limitation of using structural equation modelling in this study has been that the models derived could not account for the effect of variables not included. It is not unusual, in studies of this type, to find that the variable of direct interest in a particular study has the major contribution to a quality of life score. See for example, Judge and Watanabe's (1993) finding that job satisfaction had a .43 correlation with life satisfaction, Klein, Tatone and Lindsey's (1989) finding that social support had a .28 correlation with life satisfaction, or Ducharme's (1994) finding that conjugal support had a .45 correlation with life satisfaction. Having said that, some comfort can be taken from the fact that the **Not Enough** and **Security** beliefs continued to strongly predict quality of life even when other

variables were added to the model (see Figure 11). Still, there may be unmeasured and unreported variables (even excluding those identified in the discussion of the cognitive-motivational-relational model) which underly both the money beliefs and the quality of life scores. Until these have been identified, tested and measured, and until further evidence comes in about the veracity of the money belief measures used in this study, no firm conclusion is possible.

### Subjects

Some aspects of the sample population may have biased the results obtained. The subjects in the initial stage of the questionnaire construction were older and richer than the typical Canadian, and better educated too. This may be attributable to the voluntary nature of the study. Also, the city blocks randomly sampled comprised a high proportion single-unit dwellings and, by definition, home-owners are wealthier than renters. One of the Ottawa neighbourhoods also turned out to have a large number of retirees, people who are at a stage in their life cycle where they have built up their wealth by paying off their major debts (eg., the mortgage), and not yet begun drawing down their savings (Modigliani, 1970). To compensate for this, sampling for the cross-validation of the MBQ deliberately included apartment buildings. The sample obtained in the Stage 3 was, again, older than the general population, which may limit the generality of the results. The reported income, however, was closer to those of most Canadians.

Another aspect of the subject population possible relevant to the conclusions drawn here was the predominance of female respondents. A ratio of nearly two females for each male is not uncommon in research of this kind. This may have affected which beliefs were found to influence quality of life. In the qualitative research, the impression was formed that more females attributed a security value to money while more males attributed power and status value to it. It is possible that the size of the effect of the **Not Enough** belief on quality of life may differ for males than females, especially if that belief is influenced by the **Power** belief. Also, in a differently composed group, the **Power** belief might have



emerged as having a significant relationship to quality of life. While the research design and sample sizes precluded testing this possibility in the current research,<sup>2</sup> future research ought to develop and test money belief models separately on male and female populations.

Finally, the self-selected nature of the sample, and the areas from which the subjects were selected meant that individuals at the extreme ends of financial status -- the very rich and the very poor -- were excluded. This limits the generalizability of the findings.

### **MBQ**

The final MBQ contained psychometric weaknesses with respect to its reliability, the intercorrelations of its scales, and its validation. The alpha coefficients of reliability for the five MBQ scales consistently exceeded 0.64, but no scale exceeded .80, a more desirable result.

While nothing in the literature suggests that money beliefs are orthogonal, the attempt here was to develop independent scales in the MBQ, to enhance its psychometric usefulness. Although the construct descriptions seem to describe independent constructs for the scales, there was a degree of correlation among them, despite an item selection process which eliminated items which had a higher correlation with another scale. These correlations may result from the similarity of the subject matter (money), or the constructs may not be orthogonal. This would have influenced the development of the structural equation models, so a second order factor analysis on the Stage 1 and Stage 3 data was conducted to determine whether this latter conclusion might be warranted. This did not yield more meaningful or replicable solutions to the data. With the Stage 1 data, **Security combined with Money Itself, and Luxury with Power and Not Enough.**

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<sup>2</sup> However, a post hoc across-groups exploratory analysis of the CMR and Direct models was performed and both were found to be invariant across gender.

With the Stage 3 data, **Security** constellated with **Not Enough**, while **Power**, **Money Itself** and **Luxury** formed a second factor.

As to validation, two attempts at validating the MBQ, with the other money questionnaires and with a **Preferences in Life** questionnaire, failed. It has been suggested that these failures can be attributed to differences in the relevant content of the MBQ and the questionnaires used for validation. A priority for future work is the validation of the MBQ using alternate methods.

### Statistical

In the absence of strong theory in this area, there is no assurance that the models derived in Chapter 4 fit the data better than countless other models which were not tested. Further, the same method (self-report, Likert scale questionnaire) was used for substantially all the items contained in the models. Thus, method variance may account for some component of the relationships found among variables.

### **Future Research**

Allusions have been made throughout this document to possible future studies. With such a new field, the challenge is as much to establish the correct priorities for research questions as it is to pose good research questions. This section sets out the order that future research might take.

The first priority is the validation of the MBQ; only then can it be useful in later studies to test and modify the cognitive-motivational-relational model of money and quality of life. Absent an appropriate questionnaire, alternate methods of validation are called for. One suggestion is to use contrasted groups. The MBQ could be administered to groups of people who might reasonably be expected to hold different beliefs about money, for example, chronic debtors, entrepreneurs, financial analysts, economists, artists, or members of religious communities.

Next, emphasis should be placed on obtaining good measures of the other components of the cognitive-motivational-relational model -- goals, appraisals,

money behaviours and measures of financial situation. If the **Not Enough** belief continues as a significant predictor, the extent to which this reflects goals of money acquisition or appraisals of the need for money should be ascertained. Measures of all three must be compared to determine whether there are differences between them. These measures (assuming that there are differences) can be used to further develop the cognitive-motivational-relational model, and to assess the viability of social comparison explanations of money and quality of life.

A number of questions remain unanswered about how an individual establishes goals for the acquisition or retention of money. A strong measure of financial goals can be used in conjunction with the MBQ to answer a number of questions which arise from inspection of the cognitive-motivational-relational model. How do one's beliefs about money lead to goals or changes in goals? What other beliefs might influence money goals, for example, efficacy, the belief in a just world, etc.? To what extent do beliefs about money conform to objective reality in the individual's world? If goals are developed to serve ego-identity (as Lazarus suggests), then how well do goals correspond to measures of the need for symbolic self-completion or social comparison? These questions can be answered by a similar cross-sectional survey, using structural equation modelling as the method of analysis.

As to appraisals, there is some evidence that appraisals of reality influence economic behaviour and subjective well-being, but the appraisal process with respect to beliefs about money should be examined. Work in this area might use measures of appraisal, or coping style (eg., Epstein & Meier, 1989; Peterson et al., 1982) to identify whether individuals make financially relevant appraisals in the same way that they make other appraisals. It would also be useful to explore whether beliefs about money influence different individuals' perceptions of the same economic reality. For example, holding income levels as an independent variable, one could measure the interactions of the effects of beliefs about money, appraisals of economic conditions, and appraisals of personal wealth.

Money behaviours are another aspect of the model expected to influence beliefs. The three money questionnaires tested in this research may serve as measures of behaviour. Priority should be given to assessing that possibility, perhaps by validating the behaviour scales of the MBBS and MAS with a money behaviour scale such as that recently reported by Fank (1994) or, in an experimental condition, with observed money behaviours. Money behaviours could then be added to the cognitive-motivational-relational model to test the nature of the relationship between and among beliefs and behaviours.

Finally, the cognitive-motivational-relational model could be completed with better measures of financial situation, both at an individual and environmental level. On an individual level, reliable measures of debt and expenditures might shed light on the **Not Enough** belief -- as to whether this constitutes an appraisal or a belief. Also, information about borrowing and spending patterns will elucidate the relationship of income and quality of life. On an environmental level, more specific information about individuals' environments and financial opportunities should be obtained. Socio-economic class and broader economic circumstances such as inflation rates or unemployment levels are also relevant to the model, and could be obtained fairly easily. However, the methods of accumulating wealth available to the individual can vary considerably from socio-economic class to socio-economic class, and measuring these variations, although important, may prove more difficult. Since environment is believed to influence expectations, the pursuit is likely worthwhile. For example, Pritchard et al. (1989) found that socio-economic background correlated with how adolescents spent their money, and whether they were highly motivated to succeed. In a broader context, shifts in the economic climate have been shown to affect rates of psychopathology, an indication of how well individual's coping strategies fare in changing environments. (See Brenner, 1973; Horwitz, 1984; Warner, 1985 and, for a refutation of Brenner, Marshall and Funch, 1979.)

### Conclusion

For too long, psychologists have ignored the influence of money in human behaviour. The consequences of this are that, when practical questions come up, like, "How does money motivate us?" "Does money buy happiness?" or "What is money for?", we have few good answers. This study is part of an emerging trend to address that lack. A recent model of human motivation was adapted to set out what aspects of money (our beliefs, goals, appraisals and situation) may motivate us. It has provided suggestions for a number of promising future explorations in that regard. Focusing on money beliefs, using both qualitative and quantitative research methods, it has shown that many people believe that money is for security, power, luxury, and itself, and that one cannot obtain enough money. While more work on the model is needed before firm conclusions can be drawn, it has been suggested that the belief that money is for security is associated with happiness and the belief that there is not enough money may impair happiness. Perhaps Seneca was right when he said, "If you would make a man happy, do not add to his possessions, but subtract from his desires."

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**APPENDIX 1**  
**QUALITATIVE STUDY**

<b>Demographic characteristics of participants .....</b>	<b>119</b>
<b>Reported wealth of participants .....</b>	<b>120</b>
<b>Interview questions .....</b>	<b>121</b>
<b>Sample summary sheet .....</b>	<b>126</b>

**Table 18: Demographic characteristics of participants in qualitative study**

	<b>Male (14)</b>	<b>Female (14)</b>	<b>Total (28)</b>
<b>Age</b>			
25 to 35	4	6	10
36 to 45	6	4	10
46 to 55	4	2	6
over 56	0	2	2
<b>Average</b>	<b>40.8</b>	<b>41.5</b>	<b>42.1</b>
<b>Marital status</b>			
Single	4	3	7
Married	7	4	11
Divorced	2	5	7
Widowed	0	1	1
Separated	1	1	2
<b>Parental status</b>			
Childless	8	5	13
With children	6	9	15
<b>Education</b>			
Some high school	1	0	1
High school	1	5	6
College	1	3	4
Bachelor's	5	4	9
Master's	3	2	5
Doctorate	3	0	3

**Table 19: Reported wealth of participants in qualitative study**

	<b># of participants</b>
<b>Assets</b> under \$5,000	3
\$5,000 - \$15,000	4
\$15,000 - \$25,000	4
\$25,000 - \$50,000	3
\$50,000 - \$75,000	2
\$75,000 - \$100,000	1
\$100,000 - \$200,000	4
\$200,000 - \$300,000	2
\$300,000 - \$500,000	1
more than \$500,000	2
<b>Debts</b> under \$5,000	13
\$5,000 - \$15,000	7
\$15,000 - \$25,000	2
\$25,000 - \$50,000	1
\$50,000 - \$75,000	1
more than \$500,000	2
<b>Income</b> \$5,000 - \$10,000	1
\$10,000 - \$20,000	8
\$20,000 - \$30,000	6
\$30,000 - \$40,000	4
\$40,000 - \$60,000	3
\$60,000 - \$75,000	1
more than \$150,000	1

**MONEY BELIEFS - An Empirical Exploration by Interview**  
**Attachment 2**  
**Semi-structured Interview - topics to be covered (questions)**

---

121

**INTERVIEW 1**

**General questions**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Telephone: (days)** \_\_\_\_\_ **(evenings)** \_\_\_\_\_

**Employment (present)** \_\_\_\_\_

**(past)** \_\_\_\_\_

**Marital status** \_\_\_\_\_ **Children** \_\_\_\_\_

**Religion (child)** \_\_\_\_\_ **(adult)** \_\_\_\_\_

**Political affiliation** \_\_\_\_\_

**Personal history**

**Date of birth** \_\_\_\_\_ **Place of birth** \_\_\_\_\_

**Siblings - brothers** \_\_\_\_\_ **Sisters** \_\_\_\_\_

**Father - alive** \_\_\_\_\_ **date of death** \_\_\_\_\_

**Mother - alive** \_\_\_\_\_ **date of death** \_\_\_\_\_

**General questions - Money beliefs**

**Can you tell me what some of the reasons are why someone might want to have money?**  
**What do people want money for?**

**Can you think of the reasons why you might want to have money?**

**Why do you think that it is often considered rude to talk about money? For example, it is considered rude to ask someone how much they earn.**

**If you saw a very rich person walking down the street, what assumptions might you make about that person?**

**If you saw a very poor person walking down the street, what assumptions might you make about that person?**

Are you ever curious about how much money other people have?

What does your religion have to say about money?

Do you agree with that (those) statement(s)? Do you comply with them?

**Money goals**

Do you have goals for yourself about money? (for example, how much you would like to be earning, how much you would like to have saved, how much you would like to owe)

How will you know when you have enough money?

Can you identify any way that your goals about wealth affect your life (for example, the husband/wife you pick, the job you have)

**Subjective wealth**

What would you do if, for some reason, you lost a large portion of your money? What would be the drawbacks to you? What would be the benefits? How might your life change?

What would you do if, for some reason, you gained a large amount of money? What would be the benefits to you? What would be the drawbacks? How might your life change?

**Money history**

**Rich**

Has there ever been a time in your life when you remember being particularly rich? Having more than enough money?

What were the circumstances surrounding that?

What were the feelings, thoughts and behaviours?

Do you think this affected your present beliefs about the importance of money?

**Poor**

Has there ever been a time in your life when you remember being particularly poor? Not having enough money?

What were the circumstances surrounding that?



What were the feelings, thoughts and behaviours?

Do you think this affected your present beliefs about the importance of money?

Socialization

What are some of your earliest memories about money?

Would you say your parents were open about money?

Did your parents teach you how to handle money? How? If they did not, how did you learn?

How do/did your parents share/decide what to do with money?

Do you remember when you first found out that different people have different amounts of money? Describe that (those) experience(s)

Conflict

Have you ever had money stolen from you? What was your reaction?

Have you ever done something for money that you later felt worried or ashamed or embarrassed about?

Can you recall a time when you had a conflict with someone about money? Can you tell me what happened? (look for situation, emotion, resolution, beliefs, goals)

Have you ever had a falling out with a friend because of something s/he did for money that you did not approve of?

Gender

Do you think that men and women view money the same way?

How do you think men and women may differ with respect to money?

Gambling

Do you ever wager money - say on lottery tickets, horse races, card games, casinos, sports games, etc.

How much would you typically gamble in a month

What was your biggest win? What was that like?

What was your biggest loss? How was that?

Family money

Do you think husbands and wives should share their money, or keep separate money?

Do you think that families should share their money or keep separate money?

How do you think a husband and wife (and family) should decide how their money is spent?

How do you share/decide with your spouse (family)?

How would you (have you) teach your children about money? What values would you want to instill in them?

Are you in your parent's wills? For how much?

Money emotion

Can you recall a time/incident/situation involving money when you were very angry?

... sad?

... happy?

... afraid?

- continue with questions left unasked at first interview

Money behaviours

Do you budget your money? Do you plan how much you think you will earn and spend each week, month, or year?

Who would you give money to? (children, siblings, parents, friends, beggars)

Who do you give money to? In what circumstances? (gift, when asked)

Do you lend money? When was the last time? How much?

Do you borrow money? When was the last time? How much?

Do you keep track of what you spend?

What do you do if you run out at the end of the week/month/day?

Money facts

If I were to ask you, do you think you could estimate your net worth within \$ 1,000?

Can we now complete the financial assets and liabilities, income and expenses worksheets?

Subject       
M    F   

## MONEY BELIEFS INTERVIEWS SUMMARY SHEET

Q Pg

## BELIEFS

<u>Money gets:</u>	<u>order</u>	<u>Phrase(s)</u>	<u>self/gen</u>
BASICS	—	_____	_____
		_____	_____
LUXURIES	—	_____	_____
		_____	_____
TRAVEL	—	_____	_____
		_____	_____
SECURITY	—	_____	_____
		_____	_____
NO ANXIETY	—	_____	_____
		_____	_____
STATUS	—	_____	_____
		_____	_____
POWER	—	_____	_____
		_____	_____
FAMILY	—	_____	_____
		_____	_____
INDEPENDENCE		_____	_____
		_____	_____
FREEDOM	—	_____	_____
		_____	_____
SEX	—	_____	_____
		_____	_____
ITSELF	—	_____	_____
		_____	_____
TRANSFORM	—	_____	_____
		_____	_____
	—	_____	_____
		_____	_____
	—	_____	_____
		_____	_____
	—	_____	_____
		_____	_____

Subject         
M    F   

## MONEY BELIEFS INTERVIEWS SUMMARY SHEET

Q Pg

## BELIEFS

<u>Money won't buy</u>	<u>Phrase(s)</u>	<u>self/gen</u>	
FRIENDS			
HEALTH			
PEACE OF MIND			
LOVE			
HAPPINESS			
SATIS SELF			

## MONEY MAKES YOU:

Rich people are: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Those who inherit: \_\_\_\_\_  
 \_\_\_\_\_

When I was rich: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Poor people are: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

When I was poor: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

RELIGION \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

RUDENESS boasting \_\_\_\_\_  
 might be touched \_\_\_\_\_  
 might be judged \_\_\_\_\_

## OTHER COMMENTS/THEMES

\_\_\_\_\_  
 \_\_\_\_\_

Subject       
M    F   

## MONEY BELIEFS INTERVIEWS SUMMARY SHEET

Q Pg

## BEHAVIOURS

			Phrase(s)	
Curious	Y	N		
Money goals	Y	N		
Goals affect	Y	N		
Have enough	Y	N		
Robbed	Y	N		
Ashamed	Y	N		
Conflict	Y	N		
Falling out	Y	N		
Parents taught	Y	N		
Gamble	Y	N		
Share	Y	N		
Give	Y	N		
Lend	Y	N		
Borrow	Y	N		
Budget	Y	N		
Keep track	Y	N		
Save	Y	N		

Subject \_\_\_\_\_  
M \_ F \_

## MONEY BELIEFS INTERVIEWS SUMMARY SHEET

**Q Pg**

## GENDER THINGS

**MEN                      Y   N**

**WOMEN                    Y   N**

**OTHER COMMENTS/THEMES**

This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

## APPENDIX 2

### MONEY BELIEF QUESTIONNAIRE CONSTRUCTION

Demographic characteristics of participants .....	131
Reported wealth of participants .....	133
Materials distributed to participants - Stage 1 .....	134
Initial statistics - factor analysis of Stage 1 MBQ items	156
Items for seven factor solution of Stage 1 MBQ .....	157
Scale-related statistics for 12-item MBQ - Stage 1 data	161
Materials distributed to participants - Stage 2 .....	162
Materials distributed to participants - Stage 3 .....	175
Items for final MBQ .....	178



**Table 20: Demographic characteristics of participants in MBQ studies**

<b>Variable</b>	<b>1991 census*</b>	<b>1st stage sample</b>	<b>2nd stage sample</b>	<b>3rd stage sample</b>
<b>Number of subjects</b>		210	336	267
<b>Gender</b>	(%)	(%)	(%)	(%)
male	48	41	40	39
female	52	58	60	61
<b>Marital status</b>	(%)	(%)	(%)	(%)
single	31	22	96	33
married	53	57	2	42
separated	3	3	-	4
widowed	6	2	-	5
divorced	6	4	2	8
common-law		10	-	7
<b>Income</b>	(%)	(%)	(%)	(%)
under \$5,000	12	15	59	11
\$5,000 - \$10,000	11	8	24	16
\$10,000 - \$20,000	21	10	6	20
\$20,000 - \$30,000	18	13	1	13
\$30,000 - \$40,000	15	12	1	13
\$40,000 - \$60,000	16	20	-	15
\$60,000 - \$75,000	3	10	-	6
over \$75,000	3	5	-	-
<b>Average age</b>		42.9 yrs s.d. = 14.8	20 yrs s.d. = 3.6	41.9 yrs s.d. = 18.0

source: Statistics Canada (1992)

**Table 20 (cont'd): Demographic characteristics of participants in MBQ studies**

<b>Variable</b>	<b>1st stage sample</b>	<b>2nd stage sample</b>	<b>3rd stage sample</b>
<b>Number of subjects</b>	210	336	267
<b>Highest level of education</b>	(%)	(%)	(%)
public school	1	-	2
Grade 9	1	-	2
Grade 10	1	-	2
Grade 11	1	-	2
Completed High School	17	40	15
Some comm. college or university	18	55	22
community college degree	30	1	14
Bachelor's degree	29	1	22
Postgraduate university degree	1	1	12
Postgraduate professional accreditation	-	1	6
<b>Employment status - Employed</b>	47	14	40
Self-employed	9	2	10
Homemaker	12	-	6
Retired	11	-	18
Unemployed under 3 months	5	2	2
Unemployed over 3 months	4	2	6
Student	10	79	15
Disabled	1	1	3

**Table 21: Reported wealth of participants in MBQ studies**

	1st stage	2nd stage	3rd stage
<b>Number of subjects</b>	210	336 <sup>1</sup>	267
<b>Assets</b>	(%)		(%)
under \$5,000	11		15
\$5,000 - \$15,000	6		18
\$15,000 - \$25,000	7		6
\$25,000 - \$50,000	5		6
\$50,000 - \$75,000	4		5
\$75,000 - \$100,000	4		3
\$100,000 - \$200,000	12		16
\$200,000 - \$300,000	10		10
\$300,000 - \$500,000	13		7
more than \$500,000	9		3
<b>Debts</b>			
under \$5,000	51		51
\$5,000 - \$15,000	5		13
\$15,000 - \$25,000	8		9
\$25,000 - \$50,000	8		5
\$50,000 - \$75,000	8		4
\$75,000 - \$100,000	13		4
\$100,000 - \$200,000	2		8
\$200,000 - \$300,000	1		2
\$300,000 - \$500,000	1		-

<sup>1</sup> Wealth information not gathered for student population



# **The UNIVERSITY of WESTERN ONTARIO**

*Faculty of Social Science • Department of Psychology*

**Dear Householder:**

In the next few days, we will be conducting a survey in this area. The purpose of this study is to examine the attitudes which people hold toward money, quality of life, and the society in which they live. Your household has been chosen at random to participate in this study. A researcher will call at your house within the next week. You will be asked to complete a questionnaire which would take about an hour of your time. This questionnaire asks about your own attitudes, and also enquires about personal financial information. Completion of the questionnaire is voluntary, and, if you do choose to participate, you may refuse to answer any questions that you wish.

All members of your household 18 years old and older are welcome to complete a questionnaire. For those who choose to assist with the research, the representative will drop off questionnaires and will return the next day to pick up the completed questionnaires. If no one is home, a return envelope will be left. There is no need to put a name on anything, and thus, the information you provide will be confidential. Your assistance will be greatly appreciated. If you have any questions about this, please contact Dr. David Evans at the phone number below. Thank you for considering participation in this study.

Sincerely,

David R. Evans, Ph.D.

(519) 661-2067

R. M. (Ali) Callard, M.A.

## INSTRUCTIONS

1. Find a quiet and comfortable place where you will not be disturbed.  
Please be sure that you answer the questions without the help of others.
2. There are 5 questionnaires. in the following order:
  - 1) Demographics
  - 2) Money Beliefs
  - 3) Rokeach Value Survey
  - 4) PANAS Affect Scale
  - 5) Perceived Quality of Life
3. For each questionnaire, read the instructions carefully, and then answer the questions. The questionnaires can be completed in any order you choose.
4. If you find that you do not wish to provide any portion of the information requested, please feel free not to answer any question.
5. When you have completed all the questionnaires, put them back into the envelope provided and seal it. A research representative will come to your home tomorrow to pick it up. If you are not home, a return envelope will be provided for you to return it to us.
6. We assure you that all of your answers will be kept strictly anonymous. The information you provide will be used for research purposes only.

Thank you for assisting us in this project. If you have any questions, please contact Dr. Evans at (519) 661-2067 or at the address below

David R. Evans, Ph.D.  
R. M. (Ali) Callard, M.A.  
Department of Psychology,  
The University of Western Ontario  
London, Ontario N6A 5C2

## DEMOGRAPHIC INFORMATION

Please answer the following questions

1. Gender      ☐ Male                      ☐ Female
  
2. Age    ☐    )
  
3. Marital status      ☐ Single              ☐ Married  
                                  ☐ Divorced      ☐ Widowed  
                                  ☐ Separated      ☐ Common Law
  
4. Number of children ☐              Number of dependent children ☐    )
  
5. Highest level of education  
    ☐ Grade 8              ☐ College degree/diploma  
    ☐ Grade 9  
    ☐ Grade 10           ☐ Undergraduate degree  
    ☐ Grade 11  
    ☐ Grade 12           ☐ Postgraduate or professional degree  
    ☐ Grade 13
  
6. Employment status  
    ☐ Currently employed    ☐ Currently unemployed less than three months  
    ☐ Self-employed           ☐ Currently unemployed more than three months  
    ☐ Homemaker              ☐ Student  
    ☐ Retired                   ☐ On disability
  
7. Your family income before taxes from all sources (approximately)  
    ☐ less than \$ 5,000 per year  
    ☐ \$ 5,000 to \$ 10,000 per year  
    ☐ \$ 10,000 to \$ 20,000 per year  
    ☐ between \$ 20,000 and \$ 30,000 per year  
    ☐ between \$ 30,000 and \$ 40,000 per year  
    ☐ between \$ 40,000 and \$ 60,000 per year  
    ☐ between \$ 60,000 and \$ 80,000 per year  
    ☐ between \$ 80,000 and \$ 100,000 per year  
    ☐ more than \$ 100,000 per year  
    ☐ cannot say

PLEASE TURN PAGE OVER

8. Your own income before taxes from all sources (approximately)
- ☐ less than \$ 5,000 per year
  - ☐ \$ 5,000 to \$ 10,000 per year
  - ☐ \$ 10,000 to \$ 20,000 per year
  - ☐ between \$ 20,000 and \$ 30,000 per year
  - ☐ between \$ 30,000 and \$ 40,000 per year
  - ☐ between \$ 40,000 and \$ 60,000 per year
  - ☐ between \$ 60,000 and \$ 80,000 per year
  - ☐ between \$ 80,000 and \$ 100,000 per year
  - ☐ more than \$ 100,000 per year
9. If you were to add up all your debts, including credit cards, bank loans, mortgage, car loans, student loans, etc., what would be the approximate value?
- ☐ less than \$ 5,000
  - ☐ between \$ 5,000 and \$ 15,000
  - ☐ between \$ 15,000 and \$ 25,000
  - ☐ between \$ 25,000 and \$ 50,000
  - ☐ between \$ 50,000 and \$ 75,000
  - ☐ between \$ 75,000 and \$ 100,000
  - ☐ between \$ 100,000 and \$ 200,000
  - ☐ between \$ 200,000 and \$ 300,000
  - ☐ between \$ 300,000 and \$ 500,000
  - ☐ more than \$ 500,000
10. If you were to add up all your wealth, including bank accounts, securities, RRSP's, house (before mortgage), car, furniture, etc., what would be the approximate value?
- ☐ less than \$ 5,000
  - ☐ between \$ 5,000 and \$ 15,000
  - ☐ between \$ 15,000 and \$ 25,000
  - ☐ between \$ 25,000 and \$ 50,000
  - ☐ between \$ 50,000 and \$ 75,000
  - ☐ between \$ 75,000 and \$ 100,000
  - ☐ between \$ 100,000 and \$ 200,000
  - ☐ between \$ 200,000 and \$ 300,000
  - ☐ between \$ 300,000 and \$ 500,000
  - ☐ more than \$ 500,000

PLEASE GO ON TO THE NEXT QUESTIONNAIRE

## MONEY BELIEFS QUESTIONNAIRE

The following statements indicate beliefs that different people hold about money and about their role in society. Using the scale at the top, please circle the number beside each statement to indicate how much you agree with it as it applies to you personally

1	2	3	4	5	6	7
NOT TRUE		SOMEWHAT TRUE			VERY TRUE	

- |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1. Having money doesn't mean I get what I need.                                    |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 2. Having money means I run my own life.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3. There have been occasions when I have taken advantage of someone.               |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 4. My friends and I all have about the same amount of money.                       |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 5. I don't need money to look forward to a peaceful old age.                       |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 6. When I don't have enough money, I feel trapped.                                 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7. People who have money are blessed.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8. My first impressions of people usually turn out to be right.                    |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9. Although I do not make a lot of money, I have the time to do the things I want. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 10. I never swear.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 11. I do not enjoy having money just for its own sake.                             |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 12. It is important for me to have money for my favourite sport(s).                |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 13. How safe I feel has nothing to do with how much money I have.                  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 14. I really only want enough money to get the essentials.                         |

PLEASE TURN PAGE



1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 15. It would be hard for me to break any of my bad habits.
- 1 2 3 4 5 6 7 16. Great wealth might lead me to become greedy, idle, frivolous, etc.
- 1 2 3 4 5 6 7 17. I sometimes try to get even rather than forgive and forget.
- 1 2 3 4 5 6 7 18. I feel vulnerable if I have to ask someone for money.
- 1 2 3 4 5 6 7 19. Riches are not really a way to get power.
- 1 2 3 4 5 6 7 20. Money is a ticket to higher society.
- 1 2 3 4 5 6 7 21. It is not important for me to have enough money to live in comfort.
- 1 2 3 4 5 6 7 22. I don't care to know what other people really think of me.
- 1 2 3 4 5 6 7 23. Having money could drive my spouse (partner) and I apart.
- 1 2 3 4 5 6 7 24. I always obey laws, even if I'm unlikely to get caught.
- 1 2 3 4 5 6 7 25. I think less of someone who won't put time into earning money.
- 1 2 3 4 5 6 7 26. Having enough money enables me to live in basic comfort.
- 1 2 3 4 5 6 7 27. The more money I have, the less status I have.
- 1 2 3 4 5 6 7 28. To me, having money is a sign of virility for a man.
- 1 2 3 4 5 6 7 29. I have not always been honest with myself.
- 1 2 3 4 5 6 7 30. In most ways my life is close to my ideal.
- 1 2 3 4 5 6 7 31. I have said something bad about a friend behind his or her back.
- 1 2 3 4 5 6 7 32. Realistically, I need only enough money to support my basic needs.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 33. I can't get an idea of who someone is by knowing how much money they have.
- 1 2 3 4 5 6 7 34. I find a certain fascination about making money.
- 1 2 3 4 5 6 7 35. Only rich people can afford integrity.
- 1 2 3 4 5 6 7 36. I always know why I like things.
- 1 2 3 4 5 6 7 37. Few people would think I was okay because I had expensive things.
- 1 2 3 4 5 6 7 38. When I hear people talking privately, I avoid listening.
- 1 2 3 4 5 6 7 39. I don't find that money helps me feel secure.
- 1 2 3 4 5 6 7 40. A rich person has a better chance of winning a lawsuit than a poor person.
- 1 2 3 4 5 6 7 41. In this society, we don't earn respect by the size of our bank accounts.
- 1 2 3 4 5 6 7 42. I feel boxed in if I don't have enough money.
- 1 2 3 4 5 6 7 43. When my emotions are aroused, it biases my thinking.
- 1 2 3 4 5 6 7 44. Once I've made up my mind, other people can seldom change my opinion.
- 1 2 3 4 5 6 7 45. I have received too much change from a salesperson without telling him or her.
- 1 2 3 4 5 6 7 46. People with money get better service in stores, banks, restaurants, etc.
- 1 2 3 4 5 6 7 47. Too much attention to money can interfere in personal relationships.
- 1 2 3 4 5 6 7 48. No matter how much money I have, I would want more.
- 1 2 3 4 5 6 7 49. If I were rich, I would still work at my job.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 50. The conditions of my life are excellent.
- 1 2 3 4 5 6 7 51. I do not want money for the extra things that make life enjoyable.
- 1 2 3 4 5 6 7 52. I always declare everything at customs.
- 1 2 3 4 5 6 7 53. I am not a safe driver when I exceed the speed limit.
- 1 2 3 4 5 6 7 54. Money is just a functional thing; it buys me the things I need.
- 1 2 3 4 5 6 7 55. I would expect a rich person to be basically the same as a poor person.
- 1 2 3 4 5 6 7 56. Money is a good way to compare myself to others.
- 1 2 3 4 5 6 7 57. I would never feel hopeless if I didn't have enough money.
- 1 2 3 4 5 6 7 58. I admire rich people.
- 1 2 3 4 5 6 7 59. When I was young I sometimes stole things.
- 1 2 3 4 5 6 7 60. I am fully in control of my own fate.
- 1 2 3 4 5 6 7 61. I don't find it difficult to let people give me things.
- 1 2 3 4 5 6 7 62. I believe that when I give money to charity, I should have a say in how it is spent.
- 1 2 3 4 5 6 7 63. I would not stay with a spouse (partner) because of the money.
- 1 2 3 4 5 6 7 64. Most people think money itself is very important, but few admit it.
- 1 2 3 4 5 6 7 65. I usually feel that my time is worth more than the money I might save by shopping around for a deal.
- 1 2 3 4 5 6 7 66. I have never dropped litter on the street.
- 1 2 3 4 5 6 7 67. It's hard for me to shut off a disturbing thought.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE						
			SOMEWHAT TRUE			
					VERY TRUE	

- 1 2 3 4 5 6 7 68. Having money means I can (or would) drive an expensive car.
- 1 2 3 4 5 6 7 69. Money doesn't change people.
- 1 2 3 4 5 6 7 70. I am satisfied with my life.
- 1 2 3 4 5 6 7 71. For me, money is less important than breeding or education or talent in comparing people.
- 1 2 3 4 5 6 7 72. I want only enough money for a roof over my head and food on the table.
- 1 2 3 4 5 6 7 73. I sometimes drive faster than the speed limit.
- 1 2 3 4 5 6 7 74. I never regret my decisions.
- 1 2 3 4 5 6 7 75. Financial concerns don't enter into any decisions I make.
- 1 2 3 4 5 6 7 76. If I have a lot of money, I will be thought of as more distinguished.
- 1 2 3 4 5 6 7 77. Having money does not mean I am free.
- 1 2 3 4 5 6 7 78. People obey those with money.
- 1 2 3 4 5 6 7 79. If a friend and I had a dispute over money, I would rather lose a friendship than be ripped off.
- 1 2 3 4 5 6 7 80. I never read sexy books or magazines.
- 1 2 3 4 5 6 7 81. I sometimes lose out on things because I can't make up my mind soon
- 1 2 3 4 5 6 7 82. Sometimes I am so caught up in getting money that I forget to enjoy its benefits.
- 1 2 3 4 5 6 7 83. Having money means having less leisure time.
- 1 2 3 4 5 6 7 84. I like to reward myself by going away on an extra special vacation.
- 1 2 3 4 5 6 7 85. I do not need money to exist.
- 1 2 3 4 5 6 7 86. Money changes people for the better.
- 1 2 3 4 5 6 7 87. I have done things that I don't tell other people about.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 88. The reason I vote is because my vote can make a difference.
- 1 2 3 4 5 6 7 89. It is better not to talk openly about money because then we can all pretend we have about the same amount.
- 1 2 3 4 5 6 7 90. So far I have gotten the important things I want in life.
- 1 2 3 4 5 6 7 91. I always feel that there is enough money for me.
- 1 2 3 4 5 6 7 92. No matter what I do, if I am rich I will be respected.
- 1 2 3 4 5 6 7 93. To be poor and lacking in material things is to be free.
- 1 2 3 4 5 6 7 94. I never take things that don't belong to me.
- 1 2 3 4 5 6 7 95. My parents were not always fair when they punished me.
- 1 2 3 4 5 6 7 96. In dealing with other people, I believe that money gives one strength.
- 1 2 3 4 5 6 7 97. My family would not break up if it fell on hard times financially.
- 1 2 3 4 5 6 7 98. Making money is fun all by itself.
- 1 2 3 4 5 6 7 99. I think it is better for me to do things for myself than to pay other people to do them for me.
- 1 2 3 4 5 6 7 100. People who are rich can do things and go places that poor people cannot.
- 1 2 3 4 5 6 7 101. I have taken sick-leave from work or school even though I wasn't really sick.
- 1 2 3 4 5 6 7 102. I am a completely rational person.
- 1 2 3 4 5 6 7 103. Survival is more than a matter of having enough money.
- 1 2 3 4 5 6 7 104. Rich people seem to me to have become more shallow.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 105. I have no idea how much money my friends have.
- 1 2 3 4 5 6 7 106. When I have money, I feel no harm will come to me.
- 1 2 3 4 5 6 7 107. Having money does not mean that I have done well.
- 1 2 3 4 5 6 7 108. I have never damaged a library book or store merchandise without reporting it.
- 1 2 3 4 5 6 7 109. I rarely appreciate criticism.
- 1 2 3 4 5 6 7 110. If I could live my life over, I would change almost nothing.
- 1 2 3 4 5 6 7 111. Even if I owe people money, they don't affect my life in any way.
- 1 2 3 4 5 6 7 112. Having a credit card gives me a sense of power.
- 1 2 3 4 5 6 7 113. If my family were to have more money, we would not be as close in the things we do.
- 1 2 3 4 5 6 7 114. Part of the thrill of taking money is not getting caught.
- 1 2 3 4 5 6 7 115. I have some pretty awful habits.
- 1 2 3 4 5 6 7 116. I am very confident of my judgments.
- 1 2 3 4 5 6 7 117. I prefer to earn money in my leisure time.
- 1 2 3 4 5 6 7 118. If I have money, I get all the toys I want.
- 1 2 3 4 5 6 7 119. Even without money, I would not be homeless.
- 1 2 3 4 5 6 7 120. Getting a lot of money can be the ruin of some people.
- 1 2 3 4 5 6 7 121. I could not guess how much money someone at work makes.
- 1 2 3 4 5 6 7 122. I don't gossip about other people's habits.
- 1 2 3 4 5 6 7 123. I have sometimes doubted my ability as a lover.
- 1 2 3 4 5 6 7 124. The thought of being poor terrifies me.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 125. Using wealth to achieve status is morally wrong.
- 1 2 3 4 5 6 7 126. When you can't pay your bills, you lose control of your life to other people.
- 1 2 3 4 5 6 7 127. When I give money to others, I do not expect to have a say in how they spend it.
- 1 2 3 4 5 6 7 128. By earning money to contribute to the family, I show my affection for them.
- 1 2 3 4 5 6 7 129. Wanting more money when I cannot get it would make me unhappy.
- 1 2 3 4 5 6 7 130. It's all right with me if some people happen to dislike me.
- 1 2 3 4 5 6 7 131. The amount of money I have does not influence how I spend my time.
- 1 2 3 4 5 6 7 132. My lifestyle just increases to match the amount of money I have.
- 1 2 3 4 5 6 7 133. The personality of people who inherit money is affected by their wealth.
- 1 2 3 4 5 6 7 134. When I think about it, I realize that I don't really need money, even to support my basic needs.
- 1 2 3 4 5 6 7 135. It is not my business how other people spend their money.
- 1 2 3 4 5 6 7 136. It is important to me to have enough money, so there is one less thing to worry about.
- 1 2 3 4 5 6 7 137. I don't always know the reasons why I do the things I do.
- 1 2 3 4 5 6 7 138. I have less respect for myself if I earn no money.
- 1 2 3 4 5 6 7 139. It is not very important to me to pay my own way.
- 1 2 3 4 5 6 7 140. I would have more political influence if I had more money.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 141. The drive to earn money can break up a family.
- 1 2 3 4 5 6 7 142. Spending money is a good way to deal with boredom.
- 1 2 3 4 5 6 7 143. I prefer to make less money and have more time to take it easy.
- 1 2 3 4 5 6 7 144. I sometimes tell lies if I have to.
- 1 2 3 4 5 6 7 145. It is not important for me to have money to own beautiful things like a nice home and garden.
- 1 2 3 4 5 6 7 146. To be alive is to need money.
- 1 2 3 4 5 6 7 147. Money cannot turn people evil.
- 1 2 3 4 5 6 7 148. It is important to look as though I have money - by owning the right home, driving the right car, etc.
- 1 2 3 4 5 6 7 149. I never fear that I will wind up penniless on the streets.
- 1 2 3 4 5 6 7 150. To be honoured, I would have to make a lot of money.
- 1 2 3 4 5 6 7 151. I never cover up my mistakes.
- 1 2 3 4 5 6 7 152. I need my own money to shield me from the power that others might have over me.
- 1 2 3 4 5 6 7 153. Money can't help me influence people into making the kinds of decisions I want them to make.
- 1 2 3 4 5 6 7 154. Our common pool of money keeps our family connected.
- 1 2 3 4 5 6 7 155. If I had lots of money, I would get tired of it.
- 1 2 3 4 5 6 7 156. It is important for me to have money so I have time to do what I need to do.
- 1 2 3 4 5 6 7 157. At times, I feel that owning nice things ties me down.
- 1 2 3 4 5 6 7 158. Money can mean life itself.

PLEASE TURN PAGE



1	2	3	4	5	6	7
NOT TRUE						
			SOMEWHAT TRUE			
						VERY TRUE

- 1 2 3 4 5 6 7 159. My opinion about a friend would not change if he or she were to become a lot richer.
- 1 2 3 4 5 6 7 160. Where I live, people seem to live beyond their means.
- 1 2 3 4 5 6 7 161. Having money won't keep bad things from happening to me.
- 1 2 3 4 5 6 7 162. Getting a raise at work would mean I am recognized for being good at my job.
- 1 2 3 4 5 6 7 163. I don't need money to have power.
- 1 2 3 4 5 6 7 164. If I had no money, then I would have to depend on other people.
- 1 2 3 4 5 6 7 165. I would rather be rich than well loved.
- 1 2 3 4 5 6 7 166. To become really rich, I would have to want money more than I do.
- 1 2 3 4 5 6 7 167. It is not important to me to earn enough money to have time off.
- 1 2 3 4 5 6 7 168. I would prefer to have enough money to travel first class.
- 1 2 3 4 5 6 7 169. Even without money, I would not starve.
- 1 2 3 4 5 6 7 170. Lack of money can lead you to do things you shouldn't do.
- 1 2 3 4 5 6 7 171. I think it would be rude for me to boast about how much money I have.
- 1 2 3 4 5 6 7 172. When my bank account gets down to a certain amount, I start to feel nervous.
- 1 2 3 4 5 6 7 173. Money is not a way to show that I am superior to other people.
- 1 2 3 4 5 6 7 174. Paying off a debt is like being liberated.
- 1 2 3 4 5 6 7 175. In my experience, the size of a person's paycheque has nothing to do with his or her power in a family.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 176. Without enough money, my family would fall apart.
- 1 2 3 4 5 6 7 177. I seldom make the most of opportunities I am given to increase my wealth.
- 1 2 3 4 5 6 7 178. Having enough money would give me the time to do volunteer work.
- 1 2 3 4 5 6 7 179. When I get extra money, there is nothing I really want to buy with it.
- 1 2 3 4 5 6 7 180. I think everyone needs a minimum amount of money to survive.
- 1 2 3 4 5 6 7 181. My friends might change if they were to become a lot poorer.
- 1 2 3 4 5 6 7 182. I feel it is unfair that I have as much money as I do, compared to other people.
- 1 2 3 4 5 6 7 183. Society treats people less favourably if they have money.
- 1 2 3 4 5 6 7 184. Having a credit card gives me a sense of security.
- 1 2 3 4 5 6 7 185. Having money does not really give me more choices about where I live, what I do, etc.
- 1 2 3 4 5 6 7 186. In my family, I would use money to keep others in line.
- 1 2 3 4 5 6 7 187. For me, I think a rich man is a less desirable mate.
- 1 2 3 4 5 6 7 188. I enjoy earning money, no matter how I do it.
- 1 2 3 4 5 6 7 189. It is not important for me to have money at holidays so I can get all the "extras", like decorations, gifts, and specialty foods.
- 1 2 3 4 5 6 7 190. I need money to provide my daily needs.
- 1 2 3 4 5 6 7 191. If I won a lottery, I would feel the same about my life.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 192. Being poor isn't as bad when my friends don't have any money either.
- 1 2 3 4 5 6 7 193. Having lots of money would make me fearful of losing it.
- 1 2 3 4 5 6 7 194. The more I am paid, the higher my self-esteem.
- 1 2 3 4 5 6 7 195. I would have less flexibility in my life if I had more money.
- 1 2 3 4 5 6 7 196. People are more likely to do things for me if they think I have money.
- 1 2 3 4 5 6 7 197. A woman with money of her own has less choice in looking for a husband.
- 1 2 3 4 5 6 7 198. Part of the fun of making money is the risk involved.
- 1 2 3 4 5 6 7 199. Greed is the root of much human misery.
- 1 2 3 4 5 6 7 200. Being poor means always struggling to make ends meet and not having time for other things.
- 1 2 3 4 5 6 7 201. I don't need money to ensure that I get the best education I can.
- 1 2 3 4 5 6 7 202. Money is to make sure I have shelter from bad weather.
- 1 2 3 4 5 6 7 203. If I had less money, I would still be about as content as I am now.
- 1 2 3 4 5 6 7 204. I tend to compare myself with people who have more money than I do.
- 1 2 3 4 5 6 7 205. The amount of money I have does not influence how calm I am within myself.
- 1 2 3 4 5 6 7 206. When one has money, one is recognized.
- 1 2 3 4 5 6 7 207. You have more constraints when you have money.
- 1 2 3 4 5 6 7 208. People like to hang around with me because I have money.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 209. Money alone doesn't bring me any pleasure.
- 1 2 3 4 5 6 7 210. I prefer to have enough money to avoid doing chores I don't like (for example, car repairs, housework, lawn care, tailoring).
- 1 2 3 4 5 6 7 211. I think I should own a modest house that I can afford.
- 1 2 3 4 5 6 7 212. If I want to be spiritual, I need to get away from the trappings of money.
- 1 2 3 4 5 6 7 213. It is not necessary to have money to get my minimum needs met.
- 1 2 3 4 5 6 7 214. I sometimes wonder how other people can afford the things they do.
- 1 2 3 4 5 6 7 215. Having wealth is no way to gain prestige.
- 1 2 3 4 5 6 7 216. I would be ashamed of not having enough money to take care of myself.
- 1 2 3 4 5 6 7 217. One person giving money to another person does not give them power over them.
- 1 2 3 4 5 6 7 218. If I give money to people I love, I know they will stay with me.
- 1 2 3 4 5 6 7 219. Without things like love, trust, and loyalty, I wouldn't care how much money I had.
- 1 2 3 4 5 6 7 220. Having money lets me hire people to do things so I have time for myself.
- 1 2 3 4 5 6 7 221. I don't need money to live a satisfying lifestyle.
- 1 2 3 4 5 6 7 222. If I got more money, I would probably become less concerned about others.
- 1 2 3 4 5 6 7 223. The more money you have, the less you should talk about it.
- 1 2 3 4 5 6 7 224. Having money means that I can take care of any emergencies.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 225. I see money more as a tool than as a measure of my success.
- 1 2 3 4 5 6 7 226. When I have my own money, I feel I can control my own life and choose what I do.
- 1 2 3 4 5 6 7 227. As a parent, I would not use money to get my children to do things.
- 1 2 3 4 5 6 7 228. It is important for me to support my family by providing money.
- 1 2 3 4 5 6 7 229. Getting money just for the sake of getting money is pointless.
- 1 2 3 4 5 6 7 230. My time is worth money.
- 1 2 3 4 5 6 7 231. I don't need money to let me live a satisfying lifestyle.
- 1 2 3 4 5 6 7 232. At times in my life when I am happier, my level of wealth is less important to me.
- 1 2 3 4 5 6 7 233. I get along better with people who have the same amount of money as I do.
- 1 2 3 4 5 6 7 234. Without money, my later years would be ones of worrying about how I am going to get by.
- 1 2 3 4 5 6 7 235. I can't tell how successful I: by how much money I have.
- 1 2 3 4 5 6 7 236. If I had more money, I would have more children.
- 1 2 3 4 5 6 7 237. Money can buy me a house, but not a home.
- 1 2 3 4 5 6 7 238. If I had more money, I would have more spare time.
- 1 2 3 4 5 6 7 239. I do not need money to buy clothes.
- 1 2 3 4 5 6 7 240. How much I rely on money changes my involvement with my faith.
- 1 2 3 4 5 6 7 241. The amount of money I earn has nothing to do with my standing in the community.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 242. I know my parents loved me because they supported me financially.
- 1 2 3 4 5 6 7 243. Even with money, I can't tell other people what to do.
- 1 2 3 4 5 6 7 244. I have more choice of who will date me if I have more money.
- 1 2 3 4 5 6 7 245. Money alone is of no interest to me.
- 1 2 3 4 5 6 7 246. If I had less money than I do now, I would still spend about the same amount of time each day working at a job.
- 1 2 3 4 5 6 7 247. I do not need money to have enough to eat.
- 1 2 3 4 5 6 7 248. Having money lets me buy all the latest gadgets.
- 1 2 3 4 5 6 7 249. When I have less money, my friends treat me the same way.
- 1 2 3 4 5 6 7 250. I prefer to have more money than most of my friends.
- 1 2 3 4 5 6 7 251. Money can't buy freedom.
- 1 2 3 4 5 6 7 252. When I have enough money, I am not stressed about what tomorrow will bring.
- 1 2 3 4 5 6 7 253. When I die, I would prefer to be in debt up to my ears.
- 1 2 3 4 5 6 7 254. For a man, getting money to attract a mate is part of growing up.
- 1 2 3 4 5 6 7 255. Having money does not give me the authority to decide how things will be done.
- 1 2 3 4 5 6 7 256. It is important to have money for protection in case I (or my spouse) lose a job.
- 1 2 3 4 5 6 7 257. Even if I had more money, I doubt people would make an effort to please me.

PLEASE TURN PAGE

1	2	3	4	5	6	7
NOT TRUE			SOMEWHAT TRUE			VERY TRUE

- 1 2 3 4 5 6 7 258. For the same amount of money, I would rather work longer at a job I like than work shorter hours at a job I dislike.
- 1 2 3 4 5 6 7 259. Money can't put a roof over my head.
- 1 2 3 4 5 6 7 260. If I know where someone works and where they live, I can generally tell how much money they have.
- 1 2 3 4 5 6 7 261. I would be the same no matter how much money I had.
- 1 2 3 4 5 6 7 262. I ought to have enough money to drive a car instead of having to take the bus or walk.
- 1 2 3 4 5 6 7 263. Money would not give me authority over others.
- 1 2 3 4 5 6 7 264. The most important reason to have money is so I can enjoy the best life has to offer.
- 1 2 3 4 5 6 7 265. People gain status in relation to how much money they have.
- 1 2 3 4 5 6 7 266. I need money so that I won't fear being evicted or having my mortgage foreclosed.

THANK YOU FOR COMPLETING THIS PORTION OF THE  
QUESTIONNAIRE.  
PLEASE TURN TO THE NEXT PAGE FOR NEW INSTRUCTIONS.

PLEASE TURN PAGE

## PERCEIVED QUALITY OF LIFE QUESTIONNAIRE - 3

The following 12 questions will assess your levels of satisfaction across a broad range of specific areas of your life. For each of the 12 questions, please indicate with a circle the number on the scale which best describes your present level of satisfaction with that specific area of your life. Please note that each scale ranges from 1 "completely dissatisfied" to 7 "completely satisfied."

**(1) PERSONAL DEVELOPMENT** This question deals with some of the personal things that you do in order to improve yourself, for example, setting achievable goals, being good-humoured, handling criticism in a constructive manner, etc. Overall, how satisfied are you in the area of personal growth or development?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(2) HELPING BEHAVIOUR** This item refers to those things that you do that benefit others, for example, volunteer work, donating blood, giving to charities, etc. Overall, how satisfied are you with your helping behaviours?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(3) POLITICAL BEHAVIOUR** Overall, how satisfied are you with the way you keep abreast of political events or issues?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(4) SPORTS / RECREATIONAL ACTIVITY** Overall, how satisfied are you with your involvement in sports or recreational activities?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(5) HEALTHY BEHAVIOURS** Overall, how satisfied are you with your efforts to maintain your physical health?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(6) MATERIAL STANDARD OF LIVING** Overall, how satisfied are you with your material standard of living which would include things like your place of residence, car, clothes, furniture, and other personal possessions?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

*Please turn over*



**(7) FRIENDSHIPS** Overall, how satisfied are you with your interpersonal relationships which would include how many friends you have, the types of people they are, and the quality/amount of time you spend with them?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(8) CREATIVE/AESTHETIC BEHAVIOUR** Overall, how satisfied are you with your participation in artistic or cultural events, for example, working on hobbies, attending concerts or plays, visiting museums, writing, painting, etc.?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(9) FAMILY RELATIONS** Overall, how satisfied are you with your family relationships including the quality and amount of time you spend with them?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(10) VACATION BEHAVIOUR** This item refers to how you spend your vacation or holidays. Overall, how satisfied are you with your vacation activities?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(11) RELIGIOSITY OR PERSONAL PHILOSOPHY** This item refers to your set of personal values or religious beliefs which guide the decisions that you make in your life. Overall, how satisfied are you with your religious beliefs or personal philosophy?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**(12) OCCUPATIONAL ACTIVITY** Overall, how satisfied are you with your occupational activity (e.g., at work, at school, or at home)?

COMPLETELY DISSATISFIED

COMPLETELY SATISFIED

1                      2                      3                      4                      5                      6                      7

**Table 22: Initial Statistics - factor analysis of Stage 1 MBO items**

<b>Factor</b>	<b>Eigenvalue</b>	<b>% of Variance</b>	<b>Cum. % Variance</b>
1	17.74188	9.5	9.5
2	9.60571	5.2	14.7
3	6.65602	3.6	18.3
4	4.90412	2.6	20.9
5	4.47404	2.4	23.3
6	4.28522	2.3	25.6
7	3.72642	2.0	27.6
8	3.54630	1.9	29.5
9	3.35153	1.8	31.3
10	3.03610	1.6	33.0
11	2.83313	1.5	34.5
12	2.81346	1.5	36.0
13	2.78227	1.5	37.5
14	2.64914	1.4	38.9
15	2.59170	1.4	40.3
16	2.52041	1.4	41.7
17	2.47009	1.3	43.0
18	2.36914	1.3	44.3
19	2.28354	1.2	45.5
20	2.25111	1.2	46.7
21	2.21096	1.2	47.9
22	2.17381	1.2	49.1
23	2.08737	1.1	50.2
24	2.04078	1.1	51.3
25	2.01866	1.1	52.4
26	1.95883	1.1	53.4
27	1.91650	1.0	54.5
28	1.88979	1.0	55.5
29	1.84406	1.0	56.5
30	1.80661	1.0	57.4
31	1.75102	0.9	58.4
32	1.74167	0.9	59.3
33	1.66846	0.9	60.2
34	1.65072	0.9	61.1
35	1.62375	0.9	62.0
36	1.56208	0.8	62.8
37	1.54673	0.8	63.6
38	1.51319	0.8	64.5
39	1.50563	0.8	65.3
40	1.46818	0.8	66.1

**Table 23: Items for seven factor solution of Stage 1 MBO**

<b>original scale</b>	<b>factor loading</b>	
<b>Security</b>		
safety	.69465	Without money, my later years would be ones of worrying about how I am going to get by.
safety	.64695	It is important to have money for protection in case I (or my spouse) lose a job.
safety	.59808	It is important to me to have enough money, so there is one less thing to worry about.
free	.58274	I would be ashamed of not having enough money to take care of myself.
basics	.56663	I need money to provide my daily needs.
fmly	.53420	It is important for me to support my family by providing \$.
luxury	.45424	I don't need money to let me live a satisfying lifestyle.
luxury	.44277	I don't need money to live a satisfying lifestyle.
free	.49784	When I have my own money, I feel I can control my own life and choose what I do.
free	.46567	If I had no money, then I would have to depend on other people.
safety	.41124	I need money so that I won't fear being evicted or having my mortgage foreclosed.
luxury	.40830	It is not important for me to have money to own beautiful things like a nice home and garden.
<b>Power</b>		
fmly	.58580	I have more choice of who will date me if I have more \$.
power	.57216	I would have more political influence if I had more money.
comp	.56893	Having wealth is no way to gain prestige.
power	.53088	In my experience, the size of a person's paycheque has nothing to do with his or her power in a family.
status	.51112	The amount of money I earn has nothing to do with my standing in the community.
power	.50869	One person giving money to another person does not give them power over them.
status	.50483	People gain status in relation to how much money they have.
power	.47191	Riches are not really a way to get power.
power	.47504	Having money does not give me the authority to decide how things will be done.
power	.53112	Money would not give me authority over others.
power	.45149	If I have a lot of money, I will be thought of as more distinguished.
power	.42186	I don't need money to have power.

**Table 23: Items for seven factor solution of Stage 1 MBO**

<b>original scale</b>	<b>factor loading</b>	
<b>Not Enough</b>		
safety	.57514	I always feel that there is enough money for me.
luxury	.50876	I do not want money for the extra things that make life enjoyable.
time	.50051	The amount of money I have does not influence how I spend my time.
basics	.48983	Money is just a functional thing; it buys me the things I need.
tsfm	.45247	If I had less money, I would still be about as content as I am now.
free	.45022	When I don't have enough money, I feel trapped.
luxury	.44976	When I get extra money, there is nothing I really want to buy with it.
basics	.39936	I really only want enough money to get the essentials.
safety	.46844	I would never feel hopeless if I didn't have enough money.
time	.43168	It is not important to me to earn enough money to have time off.
time	.41130	Although I do not make a lot of money, I have the time to do the things I want.
time	.31209	If I were rich, I would still work at my job.
<b>Money itself</b>		
status	.61638	I admire rich people.
itself	.55217	Making money is fun all by itself.
itself	.53231	Money alone is of no interest to me.
itself	.52975	I find a certain fascination about making money.
itself	.49892	Getting money just for the sake of getting money is pointless.
itself	.48670	No matter how much money I have, I would want more.
itself	.46733	I do not enjoy having money just for its own sake.
itself	.42785	Money alone doesn't bring me any pleasure.
itself	.44201	I enjoy earning money, no matter how I do it.
status	.40054	I see money more as a tool than as a measure of my success.
safety	.39555	When I have money, I feel no harm will come to me.
itself	.36149	Most people think money itself is very important, but few admit it.

**Table 23 (cont'd): Items for seven factor solution of Stage 1 MBO**

<b>original scale</b>	<b>factor loading</b>	
<b>Circumspection</b>		
itself	.53222	If I had lots of money, I would get tired of it.
safety	.46152	Having lots of money would make me fearful of losing it.
free	.45410	I would have less flexibility in my life if I had more money.
comp	.44434	I feel it is unfair that I have as much money as I do, compared to other people.
comp	.42220	Being poor isn't as bad when my friends don't have any money either.
fmly	.41653	If my family were to have more money, we would not be as close in the things we do.
tnfm	.37030	If I want to be spiritual, I need to get away from the trappings of money.
fmly	.35436	For me, I think a rich man is a less desirable mate.
power	.41066	Having a credit card gives me a sense of power.
luxury	.37163	At times, I feel that owning nice things ties me down.
comp	.37081	I get along better with people who have the same amount of money as I do.
basics	.29987	When I think about it, I realize that I don't really need money, even to support my basic needs.
<b>Luxury</b>		
luxury	.51674	If I have money, I get all the toys I want.
luxury	.47873	My lifestyle just increases to match the amount of money I have.
luxury	.41101	Having money means I can (or would) drive an expensive car.
time	.40966	I prefer to have enough money to avoid doing chores I don't like (for example, car repairs, housework, lawn care, tailoring).
luxury	.40459	Having money lets me buy all the latest gadgets.
time	.39486	Having money lets me hire people to do things so I have time for myself.
luxury	.29887	I would prefer to have enough money to travel first class.
time	.25650	I think it is better for me to do things myself than to pay other people to do them for me.
basics	.46233	Even without money, I would not starve.
luxury	.45682	I like to reward myself by going away on an extra special vacation.
safety	.42476	I never fear that I will wind up penniless on the streets.
basics	.35346	Even without money, I would not be homeless.

**Table 23 (cont'd): Items for seven factor solution of Stage 1 MBQ**

<b>original scale</b>	<b>factor loading</b>	
		<b>Transformation</b>
tsfm	.53217	Rich people seem to me to have become more shallow.
basics	.51209	People with money get better service in stores, banks, restaurants, etc.
tsfm	.47617	Getting a lot of money can be the ruin of some people.
tsfm	.45494	The personality of people who inherit money is affected by their wealth.
status	.41217	Using wealth to achieve status is morally wrong.
tsfm	.37304	Money doesn't change people.
tsfm	.35508	At times in my life when I am happier, my level of wealth is less important to me.
tsfm	.32747	Money cannot turn people evil.
itself	.34514	Without things like love, trust, and loyalty, I wouldn't care how much money I had.
time	.29335	I prefer to earn money in my leisure time.
free	.28904	Having money does not mean I am free.
fmly	.30217	The drive to earn money can break up a family.

**Table 24: Scale-related statistics for 12-item MBQ - Stage 1 data**

<b>Construct</b>	<b># items</b>	<b>mean p value</b>	<b>mean variance</b>	<b>mean item- total R</b>	<b>IEI coeff</b>	<b>coeff alpha</b>
<b>Security</b>	12	5.33	2.51	.573	.551	.805
<b>Power</b>	12	3.25	3.34	.570	.550	.798
<b>Not Enough</b>	12	4.41	3.49	.541	.515	.782
<b>Money itself</b>	12	3.02	3.11	.546	.528	.777
<b>Luxury</b>	12	3.97	3.99	.452	.423	.658
<b>Circumspection</b>	12	2.78	2.95	.487	.470	.692
<b>Transformation</b>	12	4.48	2.85	.391	.388	.572

**MONEY BELIEFS  
CONSENT FORM**

My name is Ali Callard. I am a graduate student here at Western and my thesis advisor is Dr. David Evans. As part of my degree requirement, I am conducting a study on people's beliefs about and behaviours with money.

By coming here to participate in this study, you have earned 1 credit for your Psychology 020 course. Your participation in this study is completely voluntary. If you agree to participate, you will be asked to complete a questionnaire package. This should take no longer than 60 minutes.

If at any time during the completion of the questionnaire, you choose to withdraw from the study without loss of promised credit, you may do so. This will not affect the credit you have earned.

As a subject in this study, your rights are protected in the following ways:

- a) The information you provide will remain confidential. You will not be asked to identify yourself in any way.
- b) The information you provide will be used for research purposes only.
- c) You will not be asked to do or reveal anything that will be harmful to you in any way.

I have read the above information, understand it, and agree to participate in this study.

Signature \_\_\_\_\_

Date \_\_\_\_\_

**PLEASE RETURN THIS CONSENT FORM TO ME.**

**SHOULD YOU WISH A COPY OF THIS FORM TO KEEP,  
SIMPLY ASK AND I WILL PROVIDE AN EXTRA ONE.**



## DEMOGRAPHIC INFORMATION

Please answer the following questions:

1.     ☐ Male                      ☐ Female
  
2.     Age                      ☐                      ☐
  
3.     Marital status           ☐ Single           ☐ Married  
    ☐ Divorced       ☐ Widowed  
    ☐ Separated     ☐ Common Law
  
4.     Number of children ☐                      Number of dependent children ☐
  
5.     Highest level of education  
        ☐ Public school  
        ☐ Grade 9                      ☐ Some community college or university  
        ☐ Grade 10                   ☐ Community college degree  
        ☐ Grade 11                   ☐ Bachelor's degree  
        ☐ Grade 12                   ☐ Postgraduate university degree  
        ☐ Grade 13                   ☐ Postgraduate professional accreditation
  
6.     Employment status  
        ☐ Currently employed       ☐ Currently unemployed less than three months  
        ☐ Self-employed             ☐ Currently unemployed more than three months  
        ☐ Homemaker                 ☐ Student  
        ☐ Retired                       ☐ On disability
  
7.     Your family income before taxes from all sources this year (approximately)  
        ☐ less than \$ 5,000 a year    ☐ \$ 40,000 - \$ 60,000 a year  
        ☐ \$ 5,000 - \$ 10,000 a year   ☐ \$ 60,000 - \$ 80,000 a year  
        ☐ \$ 10,000 - \$ 20,000 a year   ☐ \$ 80,000 - \$ 100,000 a year  
        ☐ \$ 20,000 - \$ 30,000 a year   ☐ more than \$ 100,000 a year  
        ☐ \$ 30,000 - \$ 40,000 a year   ☐ cannot say
  
8.     Your own income before taxes from all sources this year (approximately)  
        ☐ less than \$ 5,000 a year    ☐ \$ 40,000 - \$ 60,000 a year  
        ☐ \$ 5,000 - \$ 10,000 a year   ☐ \$ 60,000 - \$ 80,000 a year  
        ☐ \$ 10,000 - \$ 20,000 a year   ☐ \$ 80,000 - \$ 100,000 a year  
        ☐ \$ 20,000 - \$ 30,000 a year   ☐ more than \$ 100,000 a year  
        ☐ \$ 30,000 - \$ 40,000 a year   ☐ cannot say

PLEASE TURN OVER.

## PREFERENCES QUESTIONNAIRE

### Instructions:

This questionnaire asks you to make choices. In each question there is a pair of statements. For each pair, select the statement that describes you best in how you live your life. For these statements, think about what you prefer in general, rather than just at a moment in time. Please put a check-mark in the appropriate box.

Some questions may not really seem to apply to you. For this test to work, it is important that you answer all questions, so please do your best to select one of the alternatives.

### IN GENERAL, I WOULD PREFER:

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Being transformed                    | <input type="checkbox"/> Staying as I am                      |
| 2. <input type="checkbox"/> Not being changed by my experiences  | <input type="checkbox"/> Being shaped by what I have          |
| 3. <input type="checkbox"/> Feeling safe and secure              | <input type="checkbox"/> Living on the edge                   |
| 4. <input type="checkbox"/> Sticking with my number one priority | <input type="checkbox"/> Balancing ambition with family needs |
| 5. <input type="checkbox"/> Being on my toes                     | <input type="checkbox"/> Having no worries                    |
| 6. <input type="checkbox"/> Avoiding luxuries                    | <input type="checkbox"/> Enjoying luxuries                    |
| 7. <input type="checkbox"/> Persuading people that I am right    | <input type="checkbox"/> Leaving people alone                 |
| 8. <input type="checkbox"/> Having all that I want               | <input type="checkbox"/> Not enjoying all life has to offer   |
| 9. <input type="checkbox"/> Forgetting my conscience             | <input type="checkbox"/> Sticking to my principles            |

### IN GENERAL, I WOULD PREFER

- |   |   |
|---|---|
| 10. <input type="checkbox"/> Knowing no bounds                              | <input type="checkbox"/> Staying within limits                      |
| 11. <input type="checkbox"/> Following orders                               | <input type="checkbox"/> Being in authority                         |
| 12. <input type="checkbox"/> Putting up with a situation                    | <input type="checkbox"/> Using all my energy to change something    |
| 13. <input type="checkbox"/> Indulging myself                               | <input type="checkbox"/> Going without luxuries                     |
| 14. <input type="checkbox"/> Being with people like me                      | <input type="checkbox"/> Spending time with the rich and famous     |
| 15. <input type="checkbox"/> Accepting my lot in life                       | <input type="checkbox"/> Being in charge of my own destiny          |
| 16. <input type="checkbox"/> Having control over a situation                | <input type="checkbox"/> Letting go of my control                   |
| 17. <input type="checkbox"/> Economizing                                    | <input type="checkbox"/> Travelling first class                     |
| 18. <input type="checkbox"/> Enjoying having money                          | <input type="checkbox"/> Ignoring money                             |
| 19. <input type="checkbox"/> Not having all I want                          | <input type="checkbox"/> Living extravagantly                       |
| 20. <input type="checkbox"/> Not letting money influence personal decisions | <input type="checkbox"/> Considering whether I can afford something |
| 21. <input type="checkbox"/> Being stimulated                               | <input type="checkbox"/> Having peace of mind                       |
| 22. <input type="checkbox"/> Not paying attention to others                 | <input type="checkbox"/> Noticing that others are better off        |

### IN GENERAL, I WOULD PREFER

- |  |   |
|--|---|
| 23. <input type="checkbox"/> Making a fortune                                | <input type="checkbox"/> Not thinking about money               |
| 24. <input type="checkbox"/> Being anonymous                                 | <input type="checkbox"/> Being recognized                       |
| 25. <input type="checkbox"/> Becoming different than the<br>rest of the gang | <input type="checkbox"/> Staying the same as my<br>friends      |
| 26. <input type="checkbox"/> Having enough money                             | <input type="checkbox"/> Being loaded with money                |
| 27. <input type="checkbox"/> Knowing my limitations                          | <input type="checkbox"/> Being happy in my ignorance            |
| 28. <input type="checkbox"/> Being out of harm's way                         | <input type="checkbox"/> Not caring about danger                |
| 29. <input type="checkbox"/> Letting people do as they choose                | <input type="checkbox"/> Having people do what I tell them      |
| 30. <input type="checkbox"/> Living a modest lifestyle                       | <input type="checkbox"/> Having the best of everything          |
| 31. <input type="checkbox"/> Being careful not to have<br>too much           | <input type="checkbox"/> Having as much as I want               |
| 32. <input type="checkbox"/> Having only the essentials                      | <input type="checkbox"/> Having plush surroundings              |
| 33. <input type="checkbox"/> Having influence over others                    | <input type="checkbox"/> Allowing others to influence<br>others |
| 34. <input type="checkbox"/> Being steadfast                                 | <input type="checkbox"/> Changing my personality                |
| 35. <input type="checkbox"/> Making a killing on the<br>market               | <input type="checkbox"/> Not thinking much about<br>money       |

**IN GENERAL, I WOULD PREFER**

- |  |   |
|--|---|
| 36. <input type="checkbox"/> Breaking the boundaries         | <input type="checkbox"/> Staying within limits                |
| 37. <input type="checkbox"/> Eating in the best restaurants  | <input type="checkbox"/> Not being frivolous                  |
| 38. <input type="checkbox"/> Learning how to do without      | <input type="checkbox"/> Being dissatisfied with my lifestyle |
| 39. <input type="checkbox"/> Feeling taken care of           | <input type="checkbox"/> Taking a chance                      |
| 40. <input type="checkbox"/> Staying as I am                 | <input type="checkbox"/> Becoming more concerned about myself |
| 41. <input type="checkbox"/> Being fascinated with my job    | <input type="checkbox"/> Being fascinated with wealth         |
| 42. <input type="checkbox"/> Not worrying about consequences | <input type="checkbox"/> Not fearing the loss of things       |

# MONEY BELIEFS QUESTIONNAIRE

The following statements indicate beliefs that different people hold about money and its role in society. Using the scale at the top, please circle the number beside each statement to indicate how much you agree with it as it applies to you personally.

1	2	3	4	5	6	7	
NOT TRUE			SOMEWHAT TRUE			VERY TRUE	

- |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1. Without money, my later years would be ones of worrying about how I am going to get by.           |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 2. I have more choice of who will date me if I have more money.                                      |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3. I often feel that there is not enough money for me.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 4. I don't admire rich people.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 5. If I had lots of money, I would get tired of it.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 6. If I have money, I get all the toys I want.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7. Rich people do not seem to me to have become any more shallow.                                    |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8. It is not important for me to have money to own beautiful things like a nice home and garden.     |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9. I don't need money to have power.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 10. If I were rich, I would not work at my job.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 11. Most people think money itself is very important, but few admit it.                              |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 12. When I think about it, I realize that I don't really need money, even to support my basic needs. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 13. I think it is better for me to do things myself than to pay other people to do them for me.      |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 14. The drive to earn money can break up a family.   |

PLEASE TURN PAGE.

# MONEY BELIEFS QUESTIONNAIRE

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NOT  
TRUE

VERY  
TRUE

- |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 15. If I could live my life over, I would change almost nothing.                           |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 16. It is not important to have money for protection in case I (or my spouse) lose a job.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 17. I would have more political influence if I had more money.                             |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 18. I do not want money for the extra things that make life enjoyable.                     |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 19. Making money is fun all by itself.   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 20. Having lots of money would not make me fearful of losing it.                           |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 21. My lifestyle just increases to match the amount of money I have.                       |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 22. To be alive is to need money.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 23. I need money so that I won't fear being evicted or having my mortgage foreclosed.      |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 24. If I have a lot of money, I will be thought of as more distinguished.                  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 25. I really only want enough money to get the essentials.                                 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 26. When I have money, I feel no harm will come to me.                                     |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 27. For me, I think a rich man is a more desirable mate.                                   |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 28. I'd prefer to have enough money to travel first class.                                 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 29. Having money does not mean I am free.  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 30. So far I have gotten the important things I want in life.                              |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 31. It is important to me to have enough money, so there is one less thing to worry about. |

PLEASE TURN PAGE...

# MONEY BELIEFS QUESTIONNAIRE

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- | NOT<br>TRUE |   |   |   |   |   |   | VERY<br>TRUE |   |  |
|-------------|---|---|---|---|---|---|--------------|---|--|
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |              |   |  |
|             |   |   |   |   |   |   |              | 32. Having wealth is no way to gain prestige.                                       |  |
|             |   |   |   |   |   |   |              | 33. The amount of money I have influences how I spend my time.                      |  |
|             |   |   |   |   |   |   |              | 34. Money alone is of no interest to me.  |  |
|             |   |   |   |   |   |   |              | 35. I would have less flexibility in my life if I had less money.                   |  |
|             |   |   |   |   |   |   |              | 36. Without money, I would starve.  |  |
|             |   |   |   |   |   |   |              | 37. Getting a lot of money can be the ruin of some people.                          |  |
|             |   |   |   |   |   |   |              | 38. I don't need money to live a satisfying lifestyle.                              |  |
|             |   |   |   |   |   |   |              | 39. Riches are not really a way to get power.                                       |  |
|             |   |   |   |   |   |   |              | 40. Although I do not make a lot of money, I have the time to do the things I want. |  |
|             |   |   |   |   |   |   |              | 41. I see money more as a tool than as a measure of my success.                     |  |
|             |   |   |   |   |   |   |              | 42. If I want to be spiritual, I need to get away from the trappings of money.      |  |
|             |   |   |   |   |   |   |              | 43. Even without money, I would not be homeless.                                    |  |
|             |   |   |   |   |   |   |              | 44. I prefer to earn money in my leisure time.                                      |  |
|             |   |   |   |   |   |   |              | 45. I am satisfied with my life.  |  |
|             |   |   |   |   |   |   |              | 46. I would not be ashamed of not having enough money to take care of myself.       |  |
|             |   |   |   |   |   |   |              | 47. Money would give me authority over others.                                      |  |
|             |   |   |   |   |   |   |              | 48. Money is just a functional thing; it buys me the things I need.                 |  |
|             |   |   |   |   |   |   |              | 49. I find a certain fascination about making money.                                |  |

PLEASE TURN PAGE...



# MONEY BELIEFS QUESTIONNAIRE

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- | NOT<br>TRUE |   |   |   |   |   |   | VERY<br>TRUE |  |  |
|-------------|---|---|---|---|---|---|--------------|--|--|
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |              |  |  |
|             |   |   |   |   |   |   | 50.          | I feel it is unfair that I have as much money as I do, compared to other people.                 |  |
|             |   |   |   |   |   |   | 51.          | I like to reward myself by going away on an extra special vacation.                              |  |
|             |   |   |   |   |   |   | 52.          | The personality of people who inherit money is not affected by their wealth.                     |  |
|             |   |   |   |   |   |   | 53.          | I don't need money to let me live a satisfying lifestyle.  |  |
|             |   |   |   |   |   |   | 54.          | Having money does not give me the authority to decide how things will be done.                   |  |
|             |   |   |   |   |   |   | 55.          | It is important to me to earn enough money to have time off.                                     |  |
|             |   |   |   |   |   |   | 56.          | Money alone doesn't bring me any pleasure.   |  |
|             |   |   |   |   |   |   | 57.          | I get along better with people who have the same amount of money as I do.                        |  |
|             |   |   |   |   |   |   | 58.          | Having money lets me hire people to do things so I have time for myself.                         |  |
|             |   |   |   |   |   |   | 59.          | Money cannot turn people evil.   |  |
|             |   |   |   |   |   |   | 60.          | The conditions of my life are excellent.   |  |
|             |   |   |   |   |   |   | 61.          | I need money to provide my daily needs.  |  |
|             |   |   |   |   |   |   | 62.          | In my experience, the size of a person's pay cheque has to do with his or her power in a family. |  |
|             |   |   |   |   |   |   | 63.          | I would feel hopeless if I didn't have enough money.   |  |
|             |   |   |   |   |   |   | 64.          | Getting money just for the sake of getting money is pointless.                                   |  |
|             |   |   |   |   |   |   | 65.          | Being poor isn't as bad when my friends don't have any money either.                             |  |
|             |   |   |   |   |   |   | 66.          | I never fear that I will wind up penniless on the streets.                                       |  |

PLEASE TURN PAGE...

# MONEY BELIEFS QUESTIONNAIRE

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- | NOT<br>TRUE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | VERY<br>TRUE |   |
|-------------|---|---|---|---|---|---|---|--------------|---|
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 67. Using wealth to achieve status is morally wrong.                                    |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 68. If I had no money, then I would have to depend on other people.                     |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 69. People gain status in relation to how much money they have.                         |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 70. When I get extra money, there is nothing I really want to buy with it.              |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 71. I enjoy earning money, no matter how I do it.                                       |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 72. I seldom feel that owning nice things ties me down.                                 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 73. Having money lets me buy all the latest gadgets.                                    |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 74. Without things like love, trust, and loyalty, I wouldn't care how much money I had. |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 75. In most ways my life is close to my ideal.  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 76. It is not important for me to support my family by providing money.                 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 77. The amount of money I earn has nothing to do with my standing in the community.     |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 78. If I had less money, I would still be about as content as I am now.                 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 79. No matter how much money I have, I would want more.                                 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 80. If my family were to have more money, we would not be as close in the things we do. |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 81. Having money means I can (or would) drive an expensive car.                         |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 82. Money doesn't change people.  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |   |              | 83. When I have my own money, I feel I can control my own life and choose what I do.    |

PLEASE TURN PAGE.

# MONEY BELIEFS QUESTIONNAIRE

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- | NOT<br>TRUE |   |   |   |   |   |   | VERY<br>TRUE |   |  |
|-------------|---|---|---|---|---|---|--------------|---|--|
| 1           | 2 | 3 | 4 | 5 | 6 | 7 |              |   |  |
|             |   |   |   |   |   |   | 84.          | One person giving money to another person does not give them power over them.   |  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 85.          | When I don't have enough money, I feel trapped.   |  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 86.          | I do not enjoy having money just for its own sake.  |  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 87.          | Having a credit card does not give me a sense of power.   |  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 88.          | I do not particularly want to have enough money to avoid doing chores I don't like (for example, car repairs, housework, lawn care, tailoring). |  |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 89.          | At times in my life when I am happier, my level of wealth is less important to me.  |  |

PLEASE TURN PAGE...

## MONEY BELIEFS - FEEDBACK SHEET

This study is part of my overall research on money beliefs and satisfaction with life. I am trying to find out what people believe money is for, whether the amount of money they have affects how they rate their satisfaction with life, and which (if any) beliefs influence their satisfaction with life. I need to questionnaires to measure money beliefs, money and satisfaction with life. I already have the last two, so right now, I am developing a questionnaire of money beliefs.

The second questionnaire you completed is the second draft of a questionnaire that has already been tested on 220 subjects. The first testing showed that people have basically seven beliefs about money. These suggest that people believe that money is to provide one with security, power, or luxuries. Also, there are beliefs that it wouldn't be appropriate to have too much money, that money can transform people, that money is nice to have just because it is money, and that there isn't enough money.

The first questionnaire was designed to validate the presence of those beliefs, or constructs, but without reference to money. In each set, you were asked to choose between items that represented security, power, luxury, accepting limitations, transformation, money, and inadequacy about money. I will compare the answers on the Second questionnaire to those on the first to see if people answered along the same lines.

In the third questionnaire, you were asked to come up with alternative actions. I will be reviewing each of those actions to assess whether the answers you gave are consistent with your scores on the previous two tests. This too will be used to validate the results of the first questionnaire.

When these questionnaire have been revised as a result of this study, I will give them to another group of people to see if their responses are consistent with the results I have obtained so far. I will also be asking the next group to complete questionnaires about how much money they have and how satisfied they are with their lives. So far, psychologists have not found a large relationship between the amount of money people have and how how satisfied they are with their lives. I expect to find that satisfaction is related, not so much to how much money you have, but what beliefs you have about money.

If you have any questions about this research, please ask me after the study, or you can contact me here at the University. Dr. David Evans, who is supervising my work, would also be pleased to answer any questions you might have. I am in room 3213 in this building, and Dr. Evans is in room 7404; Dr. Evans phone number is 661-3671.

If you wish to read more about money beliefs, here are some references:

- Simmel, G. (1991). The Philosophy of Money. New York: Routledge.
- Tang, T.L. (1992). The Meaning of Money Revisited. Journal of Organizational Behaviour, 13, 197-202.
- Yamauchi, K.T. & Templer, D.I. (1982). The Development of a Money Attitude Scale. Journal of Personality Assessment, 46, 522-528.

### INSTRUCTIONS

1. Find a quiet and comfortable place where you will not be disturbed. Please be sure that you answer the questions without the help of others.
2. There are 8 questionnaires, in the following order. For each questionnaire, read the instructions carefully, and then answer the questions. The questionnaires can be completed in any order you choose.
  - 1) Demographic Information
  - 2) Money Beliefs Questionnaire
  - 3) BIDR - Version 6
  - 4) Your Money and Your Life
  - 5) Money Attitude Scale
  - 6) Preferences in Life Questionnaire
  - 7) PANAS Affect Scale
  - 8) Perceived Quality of Life
3. If you find that you do not wish to provide any portion of the information requested, please feel free not to answer any question.
4. When you have completed all the questionnaires, put them back into the envelope provided and seal it. A research representative will come to your home to pick it up. If you are not home, a return envelope will be provided for you to return it to us.
5. We assure you that all of your answers will be kept strictly anonymous. The information you provide will be used for research purposes only.

Thank you for assisting us in this project. If you have any questions, please contact Dr. Evans at (519) 661-2067 or at the address below.

David R. Evans, Ph.D.  
R. M. (Ali) Callard, M.A.  
Department of Psychology,  
The University of Western Ontario  
London, Ontario N6A 5C2

## DEMOGRAPHIC INFORMATION

Please answer the following questions:

1.     ☐ Male                   ☐ Female
  
2.     Age                   ☐
  
3.     Marital status       ☐ Single           ☐ Married  
                                  ☐ Divorced       ☐ Widowed  
                                  ☐ Separated     ☐ Common Law
  
4.     Number of children ☐                   Number of dependent children ☐
  
5.     Highest level of education  
        ☐ Public school  
        ☐ Grade 9               ☐ Some community college or university  
        ☐ Grade 10           ☐ Community college degree  
        ☐ Grade 11           ☐ Bachelor's degree  
        ☐ Grade 12           ☐ Postgraduate university degree  
        ☐ Grade 13           ☐ Postgraduate professional accreditation
  
6.     Employment status  
        ☐ Currently employed     ☐ Currently unemployed less than three months  
        ☐ Self-employed         ☐ Currently unemployed more than three months  
        ☐ Homemaker           ☐ Student  
        ☐ Retired               ☐ On disability
  
7.     Your family income before taxes from all sources this year (approximately)  
        ☐ less than \$ 5,000 a year     ☐ \$ 40,000 - \$ 60,000 a year  
        ☐ \$ 5,000 - \$ 10,000 a year   ☐ \$ 60,000 - \$ 80,000 a year  
        ☐ \$ 10,000 - \$ 20,000 a year   ☐ \$ 80,000 - \$ 100,000 a year  
        ☐ \$ 20,000 - \$ 30,000 a year   ☐ more than \$ 100,000 a year  
        ☐ \$ 30,000 - \$ 40,000 a year   ☐ cannot say
  
8.     Your own income before taxes from all sources this year (approximately)  
        ☐ less than \$ 5,000 a year     ☐ \$ 40,000 - \$ 60,000 a year  
        ☐ \$ 5,000 - \$ 10,000 a year   ☐ \$ 60,000 - \$ 80,000 a year  
        ☐ \$ 10,000 - \$ 20,000 a year   ☐ \$ 80,000 - \$ 100,000 a year  
        ☐ \$ 20,000 - \$ 30,000 a year   ☐ more than \$ 100,000 a year  
        ☐ \$ 30,000 - \$ 40,000 a year   ☐ cannot say

PLEASE TURN OVER...

9. Your own income before taxes from all sources for last year (approximately)

- |   |  |
|---|--|
| <input type="checkbox"/> less than \$ 5,000 a year    | <input type="checkbox"/> \$ 40,000 - \$ 60,000 a year  |
| <input type="checkbox"/> \$ 5,000 - \$ 10,000 a year  | <input type="checkbox"/> \$ 60,000 - \$ 80,000 a year  |
| <input type="checkbox"/> \$ 10,000 - \$ 20,000 a year | <input type="checkbox"/> \$ 80,000 - \$ 100,000 a year |
| <input type="checkbox"/> \$ 20,000 - \$ 30,000 a year | <input type="checkbox"/> more than \$ 100,000 a year   |
| <input type="checkbox"/> \$ 30,000 - \$ 40,000 a year | <input type="checkbox"/> cannot say                    |

10. The income before taxes from all sources that you expect to earn next year.

- |   |  |
|---|--|
| <input type="checkbox"/> less than \$ 5,000 a year    | <input type="checkbox"/> \$ 40,000 - \$ 60,000 a year  |
| <input type="checkbox"/> \$ 5,000 - \$ 10,000 a year  | <input type="checkbox"/> \$ 60,000 - \$ 80,000 a year  |
| <input type="checkbox"/> \$ 10,000 - \$ 20,000 a year | <input type="checkbox"/> \$ 80,000 - \$ 100,000 a year |
| <input type="checkbox"/> \$ 20,000 - \$ 30,000 a year | <input type="checkbox"/> more than \$ 100,000 a year   |
| <input type="checkbox"/> \$ 30,000 - \$ 40,000 a year | <input type="checkbox"/> cannot say                    |

11. If you were to add up all your own debts, including credit cards, bank loans, mortgage, student loans, etc., what approximate value would you say it has?

- |  |  |
|--|--|
| <input type="checkbox"/> I have no debt                  | <input type="checkbox"/> between \$ 75,000 and \$ 100,000  |
| <input type="checkbox"/> less than \$ 5,000              | <input type="checkbox"/> between \$ 100,000 and \$ 200,000 |
| <input type="checkbox"/> between \$ 5,000 and \$ 15,000  | <input type="checkbox"/> between \$ 200,000 and \$ 300,000 |
| <input type="checkbox"/> between \$ 15,000 and \$ 25,000 | <input type="checkbox"/> between \$ 300,000 and \$ 500,000 |
| <input type="checkbox"/> between \$ 25,000 and \$ 50,000 | <input type="checkbox"/> more than \$ 500,000              |
| <input type="checkbox"/> between \$ 50,000 and \$ 75,000 | <input type="checkbox"/> cannot say                        |

12. If you were to add up all your own wealth, including bank accounts, securities, RRSP's, house (before mortgage), car, furniture, etc., what approximate value would you say it has?

- |  |  |
|--|--|
| <input type="checkbox"/> \$ 0                            | <input type="checkbox"/> between \$ 75,000 and \$ 100,000  |
| <input type="checkbox"/> less than \$ 5,000              | <input type="checkbox"/> between \$ 100,000 and \$ 200,000 |
| <input type="checkbox"/> between \$ 5,000 and \$ 15,000  | <input type="checkbox"/> between \$ 200,000 and \$ 300,000 |
| <input type="checkbox"/> between \$ 15,000 and \$ 25,000 | <input type="checkbox"/> between \$ 300,000 and \$ 500,000 |
| <input type="checkbox"/> between \$ 25,000 and \$ 50,000 | <input type="checkbox"/> more than \$ 500,000              |
| <input type="checkbox"/> between \$ 50,000 and \$ 75,000 | <input type="checkbox"/> cannot say                        |

13. If you were to calculate your net assets (total wealth less total debts), what approximate value would you say there is?

- |  |  |
|--|--|
| <input type="checkbox"/> I owe more than I own           | <input type="checkbox"/> between \$ 75,000 and \$ 100,000  |
| <input type="checkbox"/> less than \$ 5,000              | <input type="checkbox"/> between \$ 100,000 and \$ 200,000 |
| <input type="checkbox"/> between \$ 5,000 and \$ 15,000  | <input type="checkbox"/> between \$ 200,000 and \$ 300,000 |
| <input type="checkbox"/> between \$ 15,000 and \$ 25,000 | <input type="checkbox"/> between \$ 300,000 and \$ 500,000 |
| <input type="checkbox"/> between \$ 25,000 and \$ 50,000 | <input type="checkbox"/> more than \$ 500,000              |
| <input type="checkbox"/> between \$ 50,000 and \$ 75,000 | <input type="checkbox"/> cannot say                        |

PLEASE GO ON TO NEXT QUESTIONNAIRE...

**Table 25: Items for final MBQ (Factor Loadings with Stage 3 Data)**

key	std'zed loading	question
<b>SECURITY</b>		
+	.518	1. Without money, my later years would be ones of worrying about how I am going to get by.
+	.438	23. I need money so that I won't fear being evicted or having my mortgage foreclosed.
+	.512	31. It is important to me to have enough money, so there is one less thing to worry about.
-	.426	38. I don't need money to live a satisfying lifestyle.
-	.273	46. I would not be ashamed of not having enough money to take care of myself.
-	.529	53. I don't need money to let me live a satisfying lifestyle.
+	.432	61. I need money to provide my daily needs.
+	.524	68. If I had no money, then I would have to depend on other people.
-	.259	76. It is not important for me to support my family by providing money.
+	.611	84. When I have my own money, I feel I can control my own life and choose what I do.
<b>POWER</b>		
+	.607	2. I have more choice of who will date me if I have more money.
-	.512	9. I don't need money to have power.
+	.525	17. I would have more political influence if I had more money.
+	.607	24. If I have a lot of money, I will be thought of as more distinguished.
-	.556	32. Having wealth is no way to gain prestige.
-	.528	39. Riches are not really a way to get power.
+	.612	47. Money would give me authority over others.
+	.423	62. In my experience, the size of a person's paycheque has to do with his or her power in a family.
+	.422	69. People gain status in relation to how much money they have.
-	.495	77. The amount of money I earn has nothing to do with my standing in the community.
-	.388	84. One person giving money to another person does not give them power over them.



**Table 25 (cont'd): Items for final MBQ (Factor Loadings with Stage 3 Data)**

key	std'zed loading	question
<b>NOT ENOUGH</b>		
+	.413	3. I rarely feel that there is enough money for me.
-	.332	18. I do not want money for the extra things that make life enjoyable.
+	.386	33. The amount of money I have influences how I spend my time.
+	.307	55. It is important to me to earn enough money to have time off.
+	.631	63. I would feel hopeless if I didn't have enough money.
-	.280	70. When I get extra money, there is nothing I really want to buy with it.
-	.594	78. If I had less money, I would still be about as content as I am now.
+	.529	85. When I don't have enough money, I feel trapped.
<b>ITSELF</b>		
+	.481	19. Making money is fun all by itself.
-	.651	34. Money alone is of no interest to me.
-	.455	41. I see money more as a tool than as a measure of my success.
+	.651	49. I find a certain fascination about making money.
-	.635	56. Money alone doesn't bring me any pleasure.
-	.693	64. Getting money just for the sake of getting money is pointless.
+	.382	71. I enjoy earning money, no matter how I do it.
+	.447	79. No matter how much money I have, I would want more.
-	.607	86. I do not enjoy having money just for its own sake.
<b>LUXURY</b>		
+	.436	6. If I have money, I get all the toys I want.
+	.362	21. My lifestyle just increases to match the amount of money I have.
+	.498	28. I would prefer to have enough money to travel first class.
+	.285	51. I like to reward myself by going away on an extra special vacation.
+	.260	58. Having money lets me hire people to do things so I have time for myself.
+	.541	73. Having money lets me buy all the latest gadgets.
+	.552	81. Having money means I can (or would) drive an expensive car.
-	.258	88. I do not particularly want to have enough money to avoid doing chores I don't like (for example, car repairs, housework, lawn care, tailoring).

### APPENDIX 3

#### STRUCTURAL EQUATION MODELS

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Cognitive-motivational-relational model - Stage 1 data	182
Cognitive-motivational-relational model - Stage 3 data	183
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**Index of Covariance Matrices used in Structural Equation Models  
(contained on accompanying disk)**

<b>FILE NAME</b>	<b>Sample and Figure</b>	<b>Variables type</b>	<b>#</b>	<b>N</b>
COV5MBQ.1	Stage 1, households Figures 5, 7 & 11	5 MBQ items per scale, SWL score, income, age	44	191
COV5MBQ.2	Stage 2, students Figure 8	"	42	272
COV5MBQ.3	Stage 3, households Figures 6 & 9	"	44	253
COVMAS.1	Stage 3, household Confirmatory F.A.	Money Attitude Scale items (Yamauchi & Templer, 1982)	29	226
COVMBBS.1	Stage 3, household Confirmatory F.A.	Money Beliefs and Behaviour Scale (Furnham, 1986)	60	188
COVMBQ.1	Stage 3, household Confirmatory F.A.	Money Beliefs Questionnaire (Callard, 1995)	46	160
COVMES.1	Stage 3, household Confirmatory F.A.	Money Ethic Scale (Tang, 1990)	30	231

# Unstandardized Path Coefficient Equations

## Figure 5

### Cognitive-motivational-relational model - Stage 1 data

$$q46 = 1.305(\text{Security})$$

$$q31 = .914(\text{Security})$$

$$q61 = 1.000(\text{Security})$$

$$q68 = .961(\text{Security})$$

$$q83 = .946(\text{Security})$$

$$q33 = .814(\text{Not Enough})$$

$$q55 = .478(\text{Not Enough})$$

$$q70 = .685(\text{Not Enough})$$

$$q78 = 1.000(\text{Not Enough})$$

$$q85 = .869(\text{Not Enough})$$

$$\text{SWL} = 1.261(\text{QOL})$$

$$\text{PQOL} = 1.000(\text{QOL})$$

$$\text{Pos affect} = 0.330(\text{QOL})$$

$$\text{Neg affect} = -.515(\text{QOL})$$

$$\text{Family income} = .620(\text{Income})$$

$$\text{Own income} = 1.000(\text{Income})$$

$$\text{Security} = -.052(\text{Income})$$

$$\text{Not Enough} = .140(\text{Income})$$

$$\text{QOL} = .375(\text{Security}) - .544(\text{Not Enough})$$

$$\text{cov (Security, Not Enough)} = .506$$

**Unstandardized Path Coefficient Equations****Figure 6****Cognitive-motivational-relational model - Stage 3 data**

$$q46 = .609(\text{Security})$$

$$q31 = 1.744(\text{Security})$$

$$q61 = 1.000(\text{Security})$$

$$q68 = 1.718(\text{Security})$$

$$q83 = 1.664(\text{Security})$$

$$q33 = .721(\text{Not Enough})$$

$$q55 = .401(\text{Not Enough})$$

$$q70 = .563(\text{Not Enough})$$

$$q78 = 1.000(\text{Not Enough})$$

$$q85 = .965(\text{Not Enough})$$

$$\text{SWL} = 1.442\text{QOL}$$

$$\text{PQOL} = 1.000(\text{QOL})$$

$$\text{Pos affect} = 0.403(\text{QOL})$$

$$\text{Neg affect} = -.602(\text{QOL})$$

$$\text{Family income} = .447(\text{Income})$$

$$\text{Own income} = 1.000(\text{Income})$$

$$\text{Security} = .017(\text{Income})$$

$$\text{Not Enough} = -.049(\text{Income})$$

$$\text{QOL} = 1.233(\text{Security}) - .769(\text{Not Enough})$$

$$\text{cov (Security, Not Enough)} = .439$$

# Unstandardized Path Coefficient Equations

## Figure 7

### Direct model - Stage 1 data

$$q46 = 1.300(\text{Security})$$

$$q31 = .912(\text{Security})$$

$$q61 = 1.000(\text{Security})$$

$$q68 = .956(\text{Security})$$

$$q83 = .941(\text{Security})$$

$$q33 = .887(\text{Not Enough})$$

$$q55 = .521(\text{Not Enough})$$

$$q70 = .713(\text{Not Enough})$$

$$q78 = 1.000(\text{Not Enough})$$

$$q85 = .871(\text{Not Enough})$$

$$\text{SWL} = 1.255(\text{QOL})$$

$$\text{PQOL} = 1.000(\text{QOL})$$

$$\text{Pos affect} = 0.329(\text{QOL})$$

$$\text{Neg affect} = -.513(\text{QOL})$$

$$\text{Family income} = .620(\text{Income})$$

$$\text{Own income} = 1.000(\text{Income})$$

$$\text{QOL} = .367(\text{Security}) - .521(\text{Not Enough}) + .052(\text{Income})$$

$$\text{cov (Security, Not Enough)} = .524$$

# Unstandardized Path Coefficient Equations

## Figure 8

### Direct model - Stage 2 data

$$q46 = .885(\text{Security})$$

$$q31 = 1.432(\text{Security})$$

$$q61 = 1.000(\text{Security})$$

$$q68 = 1.090(\text{Security})$$

$$q83 = 1.176(\text{Security})$$

$$q33 = .987(\text{Not Enough})$$

$$q55 = .834(\text{Not Enough})$$

$$q70 = .768(\text{Not Enough})$$

$$q78 = 1.000(\text{Not Enough})$$

$$q85 = 1.371(\text{Not Enough})$$

$$\text{SWL} = 1.368(\text{QOL})$$

$$\text{PQOL} = 1.000(\text{QOL})$$

$$\text{Pos affect} = 0.456(\text{QOL})$$

$$\text{Neg affect} = -.519(\text{QOL})$$

$$\text{Family income} = .019(\text{Income})$$

$$\text{Own income} = 1.000(\text{Income})$$

$$\text{QOL} = 2.821(\text{Security}) - 2.358(\text{Not Enough}) + .065(\text{Income})$$

$$\text{cov (Security, Not Enough)} = .455$$

# Unstandardized Path Coefficient Equations

## Figure 9

### Direct model - Stage 3 data

$$q46 = .566(\text{Security})$$

$$q31 = 1.690(\text{Security})$$

$$q61 = 1.000(\text{Security})$$

$$q68 = 1.650(\text{Security})$$

$$q83 = 1.603(\text{Security})$$

$$q33 = .714(\text{Not Enough})$$

$$q55 = .416(\text{Not Enough})$$

$$q70 = .565(\text{Not Enough})$$

$$q78 = 1.000(\text{Not Enough})$$

$$q85 = .952(\text{Not Enough})$$

$$\text{SWL} = 1.443(\text{QOL})$$

$$\text{PQOL} = 1.000(\text{QOL})$$

$$\text{Pos affect} = 0.404(\text{QOL})$$

$$\text{Neg affect} = -.602(\text{QOL})$$

$$\text{Family income} = .446(\text{Income})$$

$$\text{Own income} = 1.000(\text{Income})$$

$$\text{QOL} = .932(\text{Security}) - .642(\text{Not Enough}) + .052(\text{Income})$$

$$\text{cov (Security, Not Enough)} = .443$$



# Unstandardized Path Coefficient Equations

Figure 11

Appraisal model - Stage 1 data

q46 = 1.300(Security)  
 q31 = .924(Security)  
 q61 = 1.000(Security)  
 q68 = .986(Security)  
 q83 = .980(Security)  
 q33 = .887(Not Enough)  
 q55 = .521(Not Enough)  
 q70 = .713(Not Enough)  
 q78 = 1.000(Not Enough)  
 q85 = .871(Not Enough)  
 q17 = -1.143(Power)  
 q32 = .729(Power)  
 q47 = .658(Power)  
 q69 = 1.000(Power)  
 q84 = .681(Power)  
 q21 = -.859(Luxury)  
 q51 = -.801(Luxury)  
 q13 = .846(Luxury)  
 q73 = 1.000(Luxury)  
 q28 = -.778(Luxury)  
 SWL = 1.277(QOL)  
 PQOL = 1.000(QOL)  
 Pos affect = 0.330(QOL)  
 Neg affect = -.503(QOL)  
 Family income = .621(Income)  
 Own income = 1.000(Income)  
 Power = .058(Income)  
 Luxury = -.011(Income)  
 Security = -.258(Power) -.185(Luxury) -.039(Income)  
 Not Enough = .526(Power) .663(Luxury) .113(Income)  
 QOL = .382(Security) -.554(Not Enough)  
 cov (Security, Not Enough) = .276  
 cov (Power, Luxury) = .245